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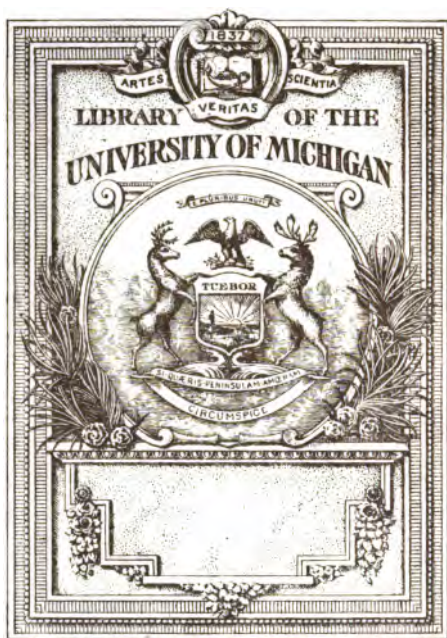
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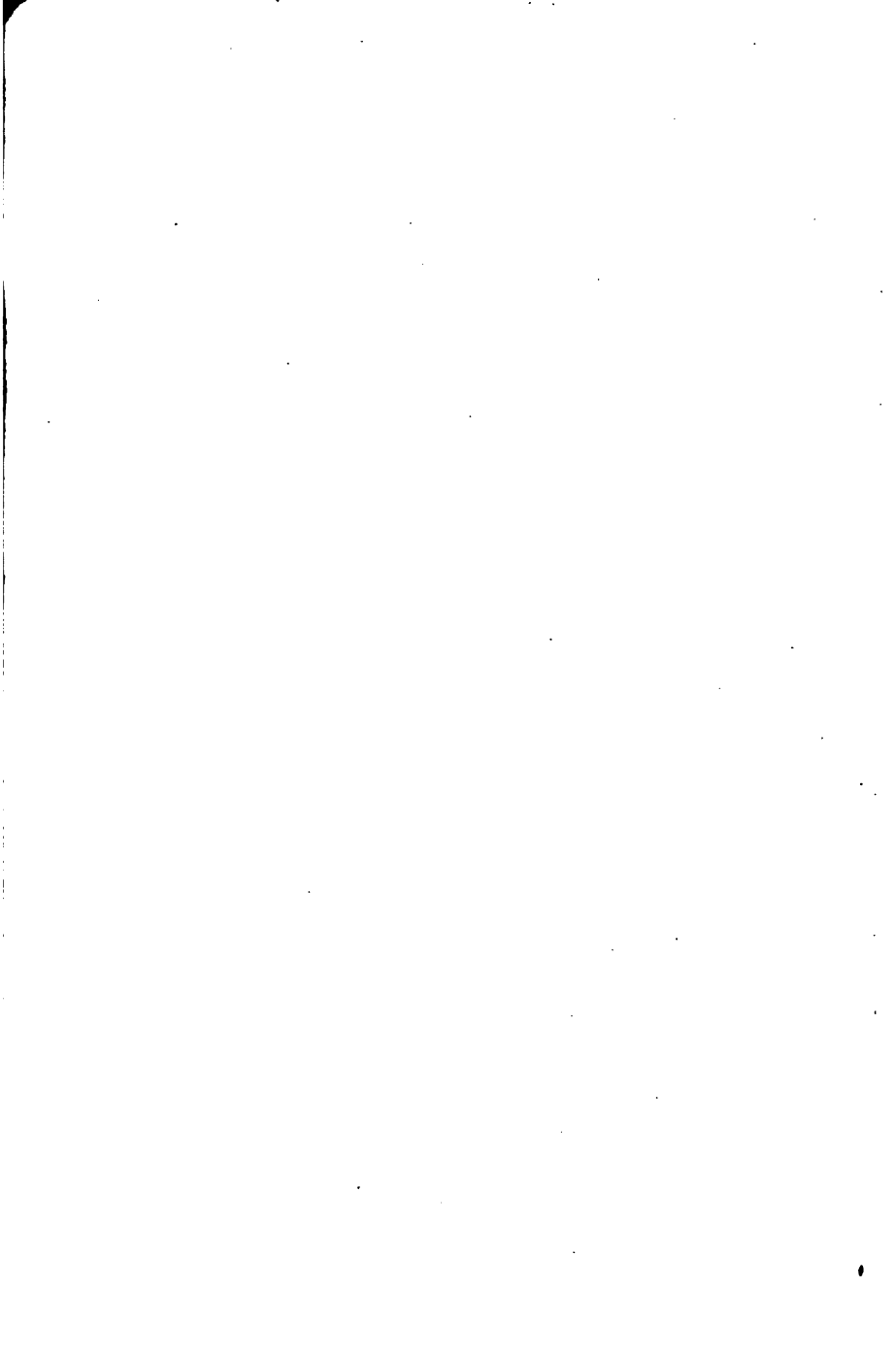


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Commercial Paper

A Text Book for Merchants
Bankers and Investors

By
Roger W. Babson
and
Ralph May



SECOND EDITION
Issued August, 1916

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by
Roger W. Babson

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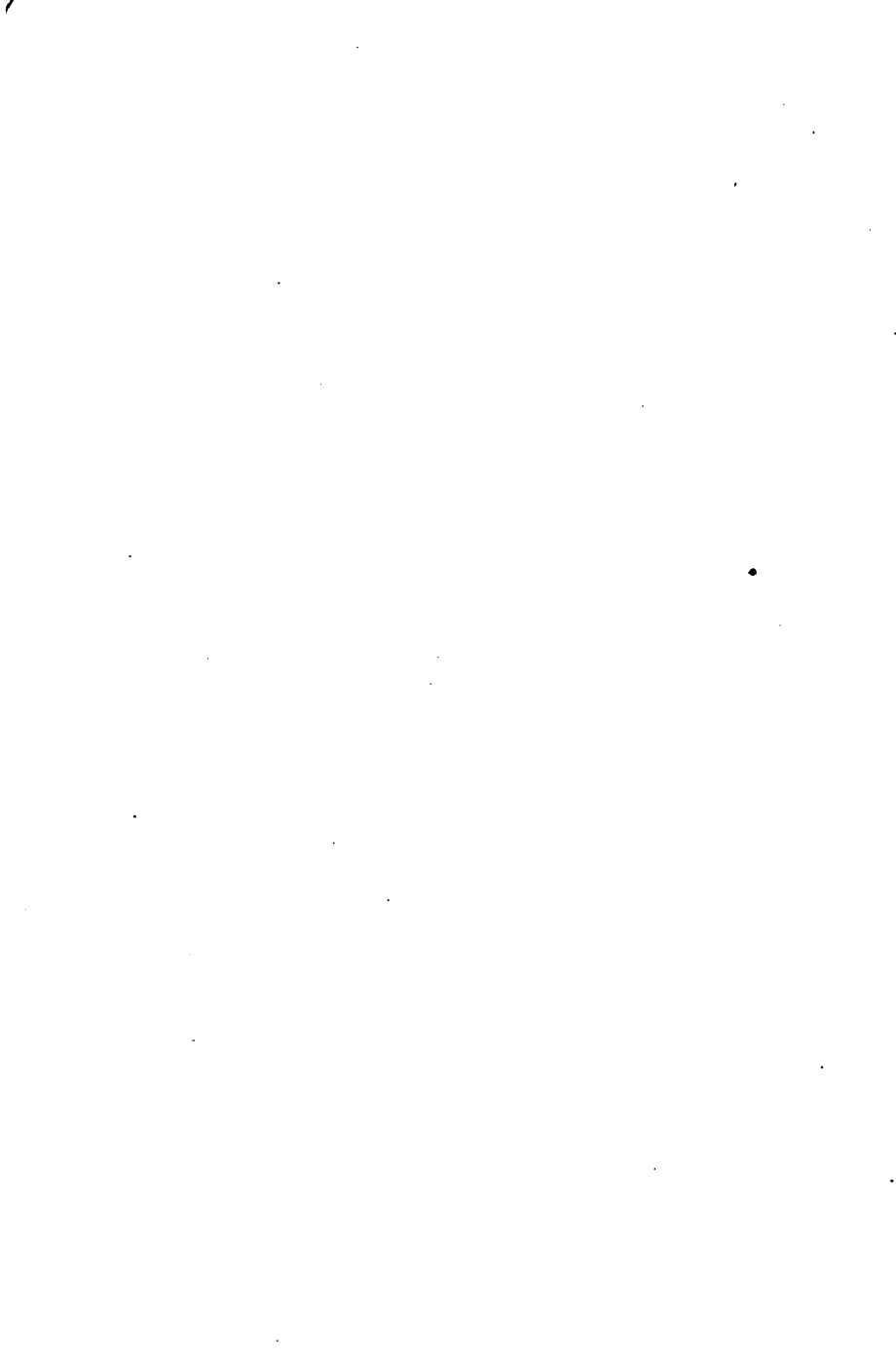
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PREFACE TO SECOND EDITION

IN the past few years all who have had to do with commercial paper have learned much regarding it. Recent events have brought increased interest in commercial paper, a larger understanding of it, and an evident desire to use this important agent in broader and at the same time in sounder ways. Today the importance of commercial paper and the need of its proper protection are more evident than ever. Yet, with a constantly growing knowledge, there has been the occasional need of creditors' committees, often followed by receiverships and failures, due almost wholly to unprotected short time debt, chiefly that of commercial paper. This faulty finance has proved of great inconvenience and expense, not only to both lender and borrower in individual instances, but to the industrial world at large.

It is clearer than ever that good business is a science, just as are medicine and law, and that the good practice of finance is as important to the world, individually and collectively, as the proper practice of other sciences. Like preventive medicine, preventive bad finance is of the greatest value. With this in mind the second edition of this book is presented to the public. This edition is based on the knowledge of commercial paper that we have acquired to date, and on the opportunities

that our present laws and industrial methods permit for its use. As in the previous edition, comparison is made with foreign practice.

The book is primarily written for the officers of our nation's twenty thousand banks, to aid them in selecting the best of such paper; but all merchants and manufacturers who borrow money, I believe, also will find this book very helpful.

Practically all the work of preparing this book has been done by my associate, Mr. Ralph May, who, in addition to knowing the theory involved, is connected with one of the largest commercial paper firms in Boston and thoroughly understands the practical side of the Commercial Paper business. Therefore to Mr. May belongs the credit of this work, my name appearing first owing to his courtesy.

ROGER W. BABSON.

WELLESLEY HILLS, MASS.

COMMERCIAL PAPER

CHAPTER I

THE SERVICE OF COMMERCIAL PAPER

TO anyone who is interested in his profession, whatever his life's work, it is always of service to review occasionally the situation in which that work is being carried on. Today every business or piece of work that is taken up is complicated. Successful accomplishments can only be brought about by adapting it to many interests which become interwoven with it. Though a little examination is usually of considerable aid in remodelling a scheme of operation, through a larger appreciation of the other man's point of view, it is difficult to get the time or the place for the necessary perspective. It is often hard to piece together a little differently the factors under which business is carried on. Perhaps the clearest instance of this is the busy manufacturer or merchant. He has little chance for any study of finance or for arguing with the men who lend him money. As a result some one man in a firm or a corporation has the financial arrangements chiefly in mind and the others leave these arrangements almost wholly to him. Specialized efforts are necessary, but it is well to have these efforts as closely allied as possible, and all knowledge which

will bring the successful conduct of business and the successful financing of these dealings more closely together will prove of value.

These pages are written on the financing of ordinary business requirements. We have evolved a medium for such financing, and although it sometimes breaks down, it has proved and is proving a very efficient instrument. This medium of finance is known as commercial paper, and as the chief financial instrument in ordinary business dealings it is of great importance to merchants, manufacturers and bankers. One set of bankers, note brokers, have grown up simply to assist in handling the great volume of commercial paper that appears every year in the business world. The purpose of this book is to show what commercial paper is and to set down as simply and clearly as it can the science of commercial paper, which means a description of the close alliance between ordinary business transactions and the financing of these transactions, the reasons for the existence of commercial paper and the ways in which commercial paper should be protected.

Commercial Paper Defined.

Commercial paper is that medium of finance used to raise money to carry salable stock of trade, and nothing else. By salable is meant stock of trade that is salable according to market conditions at the time of purchase. By stock of trade is

meant merchandise, other than bonds, stocks and similar securities.

Commercial paper is one of the most important, if not the most important factor in our financial structure. The enormous business of this country is chiefly financed through its means, and commercial paper has proved, and is proving more and more, that it is a necessary and a trustworthy agent. Because of our business conditions, commercial paper must necessarily appear in a certain definite form that rarely varies. The better the reasons for this form are known, and the better the purpose and the protection of commercial paper are understood, the more serviceable commercial paper will be to both borrower and lender. Any investigation into the service of commercial paper must also involve some discussion of the monetary and banking situation that makes the sale of commercial paper possible. It also requires an understanding of the Law of Equal Reaction.

Borrowers Should Prepare for Payment when They Borrow.

The first axiom in the borrowing of money by note or bond, where unusual risk is not admitted, is that borrowers shall prepare in their borrowing for payment of the loan at maturity. A borrower who cannot meet his obligations is not the sort of borrower lenders wish to meet, and even if his assets are sufficient ultimately to pay his debts,

liquidation takes time and causes trouble and expense for the lender. Borrowers, too, wish to avoid the danger of not being able to protect their borrowing. A note which is paid after it is due is not wholly bad; but it is not in accordance with good business, and it is not the sort desired by lenders, especially bankers who specialize in lending and who have to figure most closely on each of their investments. Any study of loans which will show such lenders how to avoid taking loans which will not be paid till they are overdue is almost as important as that which will show them how to avoid worthless or semi-worthless investments. Notes which have to be extended for a considerable time are to be classed with notes which are paid a comparatively short while after they mature. It is the changing of tactics on the part of busy men, which non-payment of obligations at maturity necessitates, that is the principal disadvantage such obligations carry with them.

Refunding of Commercial Paper May or May Not be Permissible.

It follows that those who borrow through commercial paper as a medium of finance should use the amount of money borrowed in those interests only which will presumably arrive at maturity, that is, be transferred into cash, within the life of the notes given for the amount in question. A firm may borrow \$200,000 to buy merchandise

through an issue of mercantile bills, notes or commercial paper—the terms are synonymous, and be able to sell only \$175,000 worth of merchandise within the life of the notes. If the firm issues \$200,000 of commercial paper at a time when it has open accounts or notes receivable, on which there are no prior claims, payable before the maturity of its own commercial paper, all of the \$200,000 of paper may still be properly called commercial paper, even if the stock of trade purchased with the proceeds of the paper does not prove wholly salable. This is if the paper is issued partially against stock of trade already transferred into good accounts receivable, which is stock in shape to make the strongest basis for the issue of commercial paper. If, however, the additional protection of liquid accounts receivable is not present, as commercial paper the notes fail. They may be saved only by the first reserve of the firm, which is the firm's general credit, representing its ability to sell its remaining merchandise, or to transfer assets otherwise intended into salable stock of trade. If this credit exists, the firm may be able to refund part of its first issue of paper. Such a contingency as this, however, should not be considered by lenders in analyzing the basis for the first lot of notes. Each issue of paper should live on its own merits.

Refunding of Paper is Common.

Refunding of commercial paper is common enough, as in the case of bonds. Sound business operations often take longer than the expected time. It would often injure general business to force a firm to clean up an issue of commercial paper before the merchandise, into which the proceeds of this paper have gone, has been properly placed. Such refunding, however, should never be the expectation, and should not be at the expense of the original lenders. If such lenders wish their money at the expiration of their notes, the money should be forthcoming. If the borrowers have not sold over \$175,000 of their merchandise and can sell more true commercial paper for \$25,000 to lenders, well and good; but if they cannot, they should liquidate even at a loss and make up the loss from other sources. The way to avoid the danger to lenders of loss through the expense of forced liquidation is to require a sufficient margin of safety in quick assets against each issue of commercial paper. This is a matter that is taken up in detail in the following pages.

If a Lender on Commercial Paper Wants
his Money at Maturity he Should
Always Get It.

There has been at times high-handed forcing of renewals on holders of commercial paper. By every moral and economic law, the forcing of renewals

on holders of commercial paper, even in part, is wrong. In panics renewals are apt to occur, although forced renewals of commercial paper have then occurred not wholly because of the faulty method of use of the proceeds from the paper, but largely for deeper, though no less disgraceful reasons. A recent panic brought to light, as do many renewals of paper in normal times to a less degree, a weak understanding of the use of commercial paper as a medium in finance or an utter disregard for its precepts. Finance is very much like medicine. There are certain fundamental laws of health in finance which must be recognized and regarded, and any disregard of them should be frowned on, as in the case of the man who needlessly ruins his health or the health of others. Healthy conduct in finance is, however, far more important than it is in the care of one's body, for in finance any disregard of the laws of health injures not oneself so much as others. The borrower who makes use of commercial paper as a medium of finance and who goes beyond its scope and does not reasonably protect it, is a criminal at economic if not at common or statutory law, and should be so decried. In this country we have so much work to do and there is so great a chance for profit that we are apt to be lax in our regard for proper financial methods. If a borrower on commercial paper cannot pay his notes when due because of what is really misappropriation of funds, we get the matter settled as cheaply as possible, say "hard luck" to him,

and very often lend him more money. This is a new country and, as in all new countries, matters often jump in unexpected ways, for they have no great flywheel of custom and proportion to steady them. Occasionally, kind treatment towards the maker of overdue notes is fitting; but more often it is not so, and certainly it is not what should be expected, as often seems to be the case, by the borrower.

The Proceeds of Commercial Paper should go into Merchandise only.

The use of commercial paper as a medium of finance is by its nature confined to the raising of money with which to buy stock in some regular business or to avoid selling that stock temporarily. In this country much commercial paper is sold in order to raise money to buy machinery or other fixed assets. These are no less valuable, perhaps, than the merchandise is, *but there is absolutely no hope of converting them into cash within the life of the notes, and notes issued for this purpose are not properly commercial paper.* In the American method of issuing commercial paper it is difficult to separate the chaff from the grain. We have no way of telling whether or not the particular dollars we lend when buying commercial paper go into merchandise or labor connected with the preparation of merchandise, which is the same thing, or fixed assets such as machinery, *which is not the*

same thing at all. A company may need to buy \$100,000 worth of merchandise, which it can and does sell for \$110,000, and put out \$150,000 worth of notes, the \$50,000 over and above the \$100,000 needed for the merchandise going towards the purchase of land or machinery. If the notes are made on six months' time and the merchandise is sold at a profit of \$10,000 in this time, only \$40,000 will have to be refunded. This the company can probably easily refund and keep on refunding till enough profit has been made to pay the notes off. As it turns out, the extra \$50,000 notes are safe enough investments. They are flying under entirely false colors, however, when they are thrown in with pure commercial paper. They should not properly be used for financing the purchase of the land or machinery. It is good luck rather than anything else if they are taken care of at maturity.

Commercial Paper Should Not be Used to Finance Fixed Assets.

Such spurious notes as these, as we shall see, would not be tolerated in England or the other older countries. It will be argued that if the company is making \$10,000 every six months, is in good standing, and so can refund its constantly decreasing amount of spurious commercial paper, there is no proper reason why it should not raise money in this way rather than put in more capital which is needed elsewhere. There is no reason

why the company should not issue such notes and refund them; but only provided some arrangement is made beforehand for the refunding in case the something arises which will make the general investing public refuse to take more notes. From the first axiom of borrowing in business, that borrowers shall prepare in their borrowing for the payment of the loan at maturity, to thrust a lot of notes on borrowers who can be only moderately well acquainted with the condition of the borrower, when at first sight it is apparent that if necessity arise the proceeds of such borrowing cannot be converted into cash to protect the notes, makes the thrusting of these notes on the public absolutely unjustifiable. If the notes are made to mature serially over a term of months, or if arrangements are made with the company's own banks to protect notes which cannot be renewed when renewals are needed, the case is different. Too often, however, such preparation is not made.

As a Rule Commercial Paper Cannot Carry Collateral.

Inasmuch as the proceeds of commercial paper are to go to the purchase of merchandise, it follows that from the nature of merchandise it cannot well be given as collateral. Commercial paper is, therefore, usually an ordinary promissory note without collateral. As merchandise must be sold within the life of the note, and as stock in trade,

to be sold to the best advantage, must usually be exhibited and be in shape for immediate delivery, it would be injurious, not only to the borrower but to the lender, to require it as collateral. The credit of the borrower should be such as to make the lender ready to trust that he will buy merchandise and merchandise only with the money borrowed, or the form of commercial paper should be such as to show that merchandise is bought to insure financing through commercial paper. No one should expect dry goods or heavy implements to be turned over to the lender. Occasionally a case arises where collateral in the shape of warehouse receipts or similar securities can be given as collateral, and where such cases exist exceptions often occur to the rule that commercial paper shall not be directly secured. In the instance of the financing of the purchase of merchandise where there is an exceptional chance for fraud on the part of the borrower, it may even be necessary that some such collateral be given. The *Boston News Bureau* has said, under the caption of "London Banking Comment on Cotton Bills":

"American bankers were much interested in reading this year's annual report of Sir Edwin Holden, chairman of London City & Midland Bank, because of his prominence in the negotiations in connection with cotton bills of lading. The London City & Midland Bank had an unfortunate experience with forged and bogus bills of lading on cotton and was generally credited with

authorship of the demand upon American bankers that they fully guarantee cotton bills of lading forwarded as the basis of bills of exchange. The report says in part:

“The business as conducted on old lines placed European bankers and brokers at the mercy of any fraudulent seller of cotton who was allowed to reimburse himself by drawing bills of lading which might be forged. No system has yet been evolved which can be adopted with satisfaction to everybody concerned. Some additional security has been given by what is called a validation certificate, but still the railroads will be responsible for their bills of lading only in cases in which their officers have received the cotton when the bills of lading and validation certificates are issued by them. If the railway officers issue bills of lading and validation certificates without having received the cotton, the risk will still lie on the European bankers and brokers unless the law intervenes.”

The instance of cotton is exceptional, but the case of financing the carrying of grain until sold is often somewhat similar. Similar, too, is the financing of the carrying of pig iron or of such merchandise as aging wines or whiskey. As a matter of fact, much of the commercial paper carrying warehouse receipts is paper on which no direct call for collateral is given. In many instances, in the case of financing merchandise, purchases in which warehouse receipts, bills of lading or the

like for the merchandise exist, and lend themselves readily as collateral, the borrower, to show his good faith, of his own free will, puts them up as security, making exchanges of collateral as need arises. Where collateral can be readily given, especially when in the form of United States bonded warehouse receipts, such should be given, as it may encourage lenders to lend or to take the paper on which it is collateral at a lower rate; but, as in the case of a man on trial who does not testify in his own defence, it should not necessarily injure credit if collateral on commercial paper is not given, *provided the lender treats all borrowers alike.*

No Commercial Paper Should Run for More Than a Year.

Commercial paper is a term occasionally broadened to include all borrowings, preparation for the payment of which may be made within a short time. As we have seen, commercial paper should not properly include any borrowings which are not made for the purchase of or to carry stock in trade. The time commercial paper shall run, that is, the difference in time between its sale and its maturity, is a somewhat more complex question. From a study of general business we may take a year as the longest time that commercial paper may be allowed to run. Only the very strongest borrowers, however, — those who by the nature of their business and a past history of successful operation

show especial strength, — should be allowed by lenders to make their commercial paper for as long a term as a year. The best mills, such as successful cotton mills, whose paper is endorsed by selling houses in the best of repute, are examples of such businesses. Occasionally, because of attractive rates, bankers who see by their study of fundamental business conditions that rates will probably decline, lend strong mercantile companies or firms for so long a period as a year, and do so with authority, not because it will take so long a period as a year to sell the goods bought, but because the lender is sure that when the first lot of merchandise is sold the proceeds will be used to buy more merchandise. The result is the same as if the lender had renewed once or more an original borrowing. Conversely, borrowers who study fundamental conditions are justified in borrowing year money when statistics show clearly that rates will advance. The practice of allowing credit through commercial paper on merchandise which will undoubtedly be sold long before the paper matures is, however, a dangerous practice, especially for those who are not fully familiar with fundamental business conditions and all changes which occur from week to week. For such it is better for both the lender and the borrower to start anew with each individual transaction.

Most Commercial Paper Should Mature in From Sixty Days to Six Months.

Most commercial paper should mature within six months, much within four months, much within ninety days. With any proper operation of commercial paper as a medium of finance, the time the paper has to run will decrease with sixty to ninety days as its limit. Foreign countries, older communities than this, rarely have commercial bills for six months' time. Six months should be taken in general as the maximum time commercial paper shall be allowed to run, the varying maturities allowed being governed by the convertibility of the merchandise back of them, and the foresight of the principals involved. Packing house paper, which is presumably secured by merchandise which has as ready a sale as almost anything, is especially safe and may be taken with safety for the full time, if the makers desire a six months' maturity. Commission merchants, such as those dealing in cotton cloth and selling for mills, or houses selling groceries and like goods, for which there is a constant demand, should also, if they wish, be allowed six months' time.

Paper used to Finance Specialties Should Run a Short Time Only.

Paper of manufacturers, say of a special form of shoe, the value of which is quick to change with

fashion and the sale of which ought to be arranged for practically before the paper to cover the merchandise is put out, should not be made for over five months. Care should be taken, too, that a firm manufacturing a specialty does not renew its paper except under unusual circumstances. Such renewals, if in any quantity, should be taken as a danger sign at once. Makers of heavy machinery may or may not be given credit for so long as six months with safety. Usually, in the case of such borrowers, most of the machinery made is contracted for. If a customer is not ready to fill his contract immediately and yet is good, it is perfectly proper that the manufacturer should be given credit to carry his merchandise; but care should be taken that such credit is based on a firm basis. The trade accounts of the manufacturers of heavy machinery and the like, who make their paper regularly for the longest possible period, should be examined with especial care.

Banks are Chiefly Responsible for the Form of Commercial Paper.

Borrowers through paper cannot afford to waste time over very small denominations. As the turn-over is necessarily fast for them, they must be able to borrow what they want quickly, and likewise they cannot at maturity worry over a large number of small notes. If they cannot get their money in bulk from one place, they will go where

they can so get it. Hence comparatively few notes are made in smaller denominations than \$2,500 and most in at least \$5,000 denomination. As the number of available individual investors who have money in this bulk to lend for not over six months is small, and as also it is chiefly the banks who heretofore have best been able to pass on the worth of commercial paper, it is the banks who now do principally the discounting of such paper. Hence it is the willingness or unwillingness of banks to accept commercial paper in certain forms that is responsible for those forms.

Banks Should Demand Their Rights More Firmly.

If commercial paper does not seem to be in proper form for proper finance; if, for instance, it is in the form of a six months' renewal of a note which it appears should have been retired for good and all at maturity, the bank asked to purchase it, even if it wants to make a loan, should not take it without much deliberation. It is absolutely the duty of the purchaser of commercial paper, for others as for himself, to inquire carefully into the causes of a new note of the company in question being offered at that particular time. Unless absolute assurance of legitimate need is given, the note should be declined and, if possible, the matter made public. Occasionally a three or four months' note with proper explanation

may be accepted where a six months' note may not.

Endorsements, When Available, Should be Given.

If banks feel that a certain company is controlled by very wealthy men, though weak in itself, they should insist on the endorsements of the men interested. Banks, it is the writers' belief, are not nearly enough insistent for their rights. There is much competition in this country between banks, too much so for the best banking, and risks are taken for fear that if they are not taken the chance for profit will go at once to another. It is a duty that all bankers, large and small, should recognize, and especially in regard to commercial paper, that they should hold out absolutely for what they perceive is the most proper form for their investments. This does not mean that they should demand ultra-safety, but simply a proper conservatism. Such action, even if individual, and far more powerful if concerted, will soon put an end to much loose financing, will protect the banks and will, by exploiting a sound basis of finance, greatly strengthen the chance for a successful business on the part of the borrower. It is to be noticed especially that methods which are called for by lenders usually are those to which borrowers for their own good should turn. This is not so much because doing so will make their borrowings

more attractive to lenders, but because such methods of financing their needs should insure the use of proper financial safeguards and keep borrowers from extending themselves unduly. Competition between lenders will see to it that too much conservatism is not demanded.

Receivables are an Excellent Form of Commercial Paper.

Most of the money raised for merchandise here is obtained through the discounting of single name paper, a form on which renewals are easy and in which loose financing is very possible. A small portion of our commercial paper takes a form which on its face makes renewals difficult. This is the form of receivables, where a sale of merchandise is made, a note given for it by the purchaser to the seller, who accepts it by endorsing it and gets his money through discounting it himself through brokers or banks. When buyers of paper can be sure that these receivables represent actual transactions they form the best sort of paper. As much trouble and explanation is necessary to get an acceptor of such a note to endorse another in renewal, most receivables appear but once on the market. When they do appear, they usually represent real mercantile transactions. Some businesses, like farming or the purchase of raw materials, do not readily lend themselves to this form of finance; but many do so, a great many

more than make use of this system. It is interesting to notice how other countries look on this method of finance as compared with our more common method. The English have, of course, similar financial problems to ours. They, being an older and a less rapidly growing country, have paid more attention to details and have worked out a conservative and yet a sufficiently broad system as to commercial paper for their needs. A short description of it and of the methods of dealing with this subject in one or two other countries should help us appreciate our own problems and their solution.

The Bank of England.

Quoting from the United States Monetary Commission Document entitled "Interviews on the Banking and Currency Systems of England, Scotland, France, etc." on the interview with the Governor and Directors of the Bank of England, we find the following questions and answers:—

Q. Can you state approximately the average length of time and the average size of bills discounted by you?

A. Time—forty to fifty days, size probably about £1,000.

Q. Do your branches have business relations with merchants, farmers, and all classes of people in their respective localities?

A. There are no restrictions of any kind as to the class of people with whom the bank has business relations.

Q. Is the character of your discounts or loans regulated or restricted by law or fixed by the statutes of the bank?

A. Regulated by the court of directors from time to time.

Q. Will you state (a) the class of bills usually discounted by you, giving the number of names required: (b) the minimum size, and (c) the maximum length of time to run?

A. (a) Two British names, of which one must be the acceptor; (b) No minimum; (c) Four months, exceptionally six.

It is to be noticed from this that although the Bank of England recognizes that four and even six months' time is necessary often to conclude any mercantile operation, the working of its system of commercial paper finance in taking receivables or semi-receivables only, that is, paper having the name of the man owning the merchandise or about to buy it and the man to whom it is to be sold, naturally tends to decrease the time that paper has to run to forty or fifty days. In other words, by eliminating the chance for speculation and by forcing borrowers to confine their operations to conservative business, the Bank of England has brought borrowers to borrow for only such a time as they can see clearly ahead. The questions continue:

Q. What is the distinction between what are known as prime bills and other bills?

A. A prime bill we should define as a bill accepted by a London or provincial bank in first class credit or a merchant or merchant banker of the first class whose business it is to grant credit.

Q. Do you discount any but prime bills?

A. Yes.

Q. What is the usual difference in rate charged by you upon a prime bill and for a high class loan secured by collateral having the same period to run?

A. It is impossible to give a precise answer to this question.

Q. Is the rate for discount at your branches for customers' paper and for prime bills the same as at the central office?

A. The rates current in London are telegraphed each morning to the branches for their guidance.

Q. Do you at times discount bills for parties having no account with you?

A. No.

Q. Do you allow overdrafts or do you make any advances of the kind made by Scotch banks, called cash credits?

A. Except in special circumstances overdrafts are not allowed by the bank. The bank does not make advances of the kind termed cash credits in Scotland.

Q. Is it the practice of the bank in times of stress to discount bills of a satisfactory character for its customers freely?

A. At such times the bank is always ready to discount bills of a satisfactory character for its customers or for the market.

INTERVIEW WITH SIR FELIX SCHUSTER, BARONET,
GOVERNOR OF THE UNION OF LONDON &
SMITH'S BANK LTD.

Asked regarding the acceptances of the bank, Sir Felix Schuster explained that his bank charged, usually, about one-fourth of one per cent for accepting bills, this acceptance making bills prime bills. He stated that his bank would never accept a bill unless the acceptance of the bill were covered by negotiable securities deposited with the bank, this security being in the form of warehouse receipts, stock, bonds, etc., usually stock or bonds.

Q. Is it the general practice in London to make advances to very responsible people on a single name?

A. Not in London.

Q. Quite unusual?

A. Quite unusual. The London banker's practice is only to make an advance against collateral; but in some of the country towns certain banks give overdrafts upon credits, particularly in Manchester, but local practices vary very much indeed. I think the practice tends much more to assimilate between country and London. It has become much more the practice in the country to ask and to get security against advances.

London banks, it was explained further, and especially the Bank of England, act as the banking pivot of the country. Most of the dealings are between banks, or bill (or note) brokers and banks, and only on secured or double name paper. If the bill broker takes a note to the Bank of England for discount he has to endorse it, if it is unendorsed, before it is acceptable. Hence only very strong note brokers can do business in England. Their position is criticised because in time of stress their endorsement is weakened.

INTERVIEW WITH THE GENERAL MANAGER OF
THE LONDON JOINT STOCK BANK LTD.

Q. You show about \$51,000,000 in bills discounted, loans and other securities. About what percentage of that item is in bills discounted?

A. That fluctuates considerably according to the state of the money market. If my outlook is that rates will be lower in the course of the next three months, I hurry up to buy all the bills I can possibly get today, and so I might have perhaps from thirty to forty per cent on that in bills.

Q. What is the character of those bills?

A. Those are all marketable bills, trade bills, — you know what they are — they are between the manufacturer and the man to whom he sells. It might be a promissory note endorsed by the payee. Those are the two names on it; the payee perhaps

is the manufacturer on a promissory note given by the purchaser. Instead of that here, our manufacturer draws a bill on the person to whom he sells and that man accepts it. Those trade bills are good bills mostly, but we only discount those for our own particular customers, people whose affairs we know all about, but many of them are discounted in the open market to discount houses such as Nugent's. Then I buy bills with his endorsement, which is very valuable, and get money on these trade bills from him.

Q. Do you always require two names?

A. Always.

Q. What is the average length of time of these bills?

A. Those bills are three months to run, and less. Very occasionally I may buy a four months' bill or a six months' bill, just according to how I think it promises to be a profitable venture, but as a rule the three months' engagement is all I feel free to deal in to any large extent. I want my money. We never rediscount, never turn the bills out again. It is enough to wait for their maturity; therefore it stands to reason I cannot afford to spend money for six months and sit there and wait for it.

Q. Can you give me an idea of about the minimum size of those bills?

A. No. They are of all sizes, from £100 to £10,000. From our own customers I take such bills as they have and they perhaps run mostly

in small amounts, but from discount houses I do not want to be troubled with such small bills.

Q. How does the small tradesman in London receive accommodation at the bank?

A. He must have some sort of collateral to put up.

Q. As a matter of fact a small tradesman rarely has the collateral?

A. Then it is not much accommodation he gets.

Q. It is difficult, is it not, for him to secure accommodation even through a guarantor?

A. No, if he gets a good guarantor. We do not care for guarantees as a rule because of the difficulty of enforcing them.

Q. You have the accounts of many small tradesmen?

A. Yes, lots. They get accommodation, say, in our discounting trade bills. A manufacturer of any kind of tin goods or wood goods or anything of that kind — dealers in lumber — they sell to some other fellow in the country, or wherever it may be, and they draw that trade bill upon them at not more than three months from its date, and that these small traders may bring in to us and we rigidly scrutinize them as to the customer who brings them in, to see that he is a respectable man, doing an honest business, and so we will help him by discounting those bills, if we are equally satisfied with the acceptor, if we think he is doing legitimate business with honest, legitimate people. So he gets accommodation there

without any security at all. We only get the security of another name.

Q. The practice in England is for the wholesaler or large manufacturer to finance the retailer?

A. To some extent, but as a rule that wholesaler draws his bill on his retailer, and so he has a larger volume of these trade bills and he goes to his bank or to the Union Discount Company and discounts these in larger batches.

Q. And in that way the retailer pays for his goods by an acceptance?

A. Yes.

Q. Which the wholesaler discounts?

A. Yes.

Q. If you had an account of a man running, say, a hat store, his account was satisfactory in character and had been carried with you for several years, and he wanted to stock up on hats, there would be no way in which he could go to you and borrow the money with which to buy those goods unless it was through a guarantor?

A. No, he would then go to the wholesaler from whom he would buy the goods and give that wholesaler his bill, and that bill would be a discountable article, and that is how the money would be raised.

It was pointed out that banking in London and in the country was very different. London banks and even their branches in the country, to an almost equal extent, confine their discount business to very short loans on trade bills, prime

bills or such securities. They also accept bills when covered by a deposit of collateral, for such acceptance a charge being made. They do not wish other business. The so-called country banks, it was pointed out, come into contact with agriculturists and weaker borrowers than the London banks do. To finance them, overdrafts have often to be employed. This is the general practice in the country for financing such deals as this sort of customer has to enter. Overdrafts are, of course, only allowed by banks thoroughly acquainted with the borrower. Often they are secured.

It was also pointed out that if a trade bill in good shape was brought to the bank for discount and also a collateral loan secured by Pennsylvania R.R. bonds, the bank would discount the former at a lower rate than the latter. It was also shown that during the past year this bank earned about twenty per cent net on its paid-in capital.

INTERVIEW WITH THE MANAGER OF THE UNION
DISCOUNT COMPANY OF LONDON LTD.

(This corporation deals chiefly in selling commercial paper or bills to the banks in England and on the Continent.)

Q. Do you guarantee all of the paper which you sell to the banks?

A. Yes.

Q. Describe the general character of your bills discounted.

A. The acceptances of banks and financial firms of good standing. The bills average about £700 in amount and about fifty to sixty days in currency. At least two names are required.

Q. What is the minimum size and what is the maximum length of time to run for bills discounted by you?

A. Rarely under £10 in size or longer than twelve months.

Q. What is the distinction between what are known as prime bills and other bills?

A. Prime bills are the acceptances of banks and leading firms. Other bills are the acceptances of houses in a smaller position.

Q. What is the difference between a trade bill and a finance bill? Is the rate the same on each?

A. A trade bill is one drawn on a merchant or retailer for goods actually sold and delivered. A finance bill is one drawn against a deposit of securities or sometimes without any such deposit, for the purpose of creating credit. Rate is higher on finance bills.

Scotland.

INTERVIEW WITH THE GENERAL MANAGER OF THE ROYAL BANK OF SCOTLAND.

Q. Will you state (a) the class of bills usually discounted by you, giving the number of names required; (b) the minimum size; (c) the maximum length of time to run.

A. Mercantile bills, that is, bills for the price of goods or merchandise supplied, drawn by the seller and accepted by the purchaser, £2 or £3 in some cases, up to £5/10,000. Their maximum length is six months.

Q. Do you discount to any considerable amount for individuals and merchants?

A. Yes.

Q. Explain cash credits?

A. A customer applies to be allowed to overdraw such amount as he may require from time to time up to a specified amount, and he and two or three sureties jointly and severally become bound to repay the amount that may at any time be owing, with interest, on demand being made on them. Each obligant is liable to pay the whole sum, leaving him to obtain payment from his co-obligants.

INTERVIEW WITH THE GENERAL MANAGER
OF THE UNION BANK OF SCOTLAND LTD.

Q. Will you state (a) the class of bills usually discounted by you, giving the number of names required; (b) the minimum size; (c) the maximum length of time to run.

A. The bulk of bills discounted represent ordinary mercantile transactions. In practically every case there are at least two obligants. The bulk of the bills discounted do not exceed three months' currency. It would not be practicable to indicate their average size.

Q. Do you discount to any considerable amount for individuals and merchants?

A. Yes.

Q. Explain the phrase cash credits, and upon what conditions they are given?

A. A cash credit is simply a current account on which the holder may draw to a fixed amount, interest being calculated and paid on the daily balance. In security the applicant and his sureties, termed co-obligants, sign a formal bond under which they jointly and severally guarantee to repay the bank when called upon the amount of the debt and accrued interest.

INTERVIEW WITH THE GENERAL MANAGER
OF THE COMMERCIAL BANK OF
SCOTLAND LTD.

Q. Can you state approximately the average length of time and the average size of bills discounted by you?

A. Two or three months' currency.

Q. Will you state (a) the class of bills usually discounted by you, giving the number of names required; (b) the minimum size, and (c) the maximum length of time to run?

A. (a) Trade bills, with two names, the drawer and the acceptor. (b) No minimum. (c) Six months is the maximum in general.

Q. Do you discount to any considerable extent for individuals and merchants?

A. Yes, it would be perhaps well to point out that in Scotland a large portion of the advances made to traders are granted in the form of overdrafts on current accounts. The number and amount of bills in Scotland are less now than in former years. Cash payments for the purpose of obtaining discount are more frequent, and the number of bills discounted by wholesale houses is reduced in consequence.

Q. Explain the phrase cash credits, and upon what conditions they are given.

A. A cash credit account is an operative current account in security of which the principal debtor and two or more co-obligants have granted a personal bond in favor of the bank.

Q. Is it the general practice in Scotland to make advances to very responsible people on a single name?

A. The general requirement is two names, but each case is dealt with on its merits, and there are many instances where the full requirement is not insisted upon.

These interesting interviews all point out (a) that in Scotland and England, whether in the Bank of England, in the great London banks, which finance many of the large short time undertakings of the world, whether in the English country business dealings with farmers and small producers, or in the larger business of the same kind that comes to the Scotch banks, it is not regarded the thing to grant credit under the loose provisions

that surround its granting in this country: (b) that in most cases, whether the credit is to be given in the form of an overdraft or cash credit, or in the form of discount, the names of at least two strong and interested parties are demanded, or in the case of the accepting of a bill to make it a prime bill and to put it in discountable form a deposit of salable collateral is required; (c) that, owing to joint promises borrowers are forced into putting the proceeds of the notes they discount into those operations which are practically sure to arrive at maturity before the note comes due.

France.

INTERVIEW WITH THE GOVERNOR OF THE BANK OF FRANCE.

Q. What classes of bills are discounted by the Bank of France?

A. The Bank of France discounts for everyone who has obtained the opening of a current account, bills of exchange, checks, bills to order, and commercial and agricultural warrants of fixed maturity which have not more than three months to run and which bear the signatures of three persons, tradesmen, agricultural syndicates or others, known to be solvent. The bank and the branches accept without distinction bills which are payable in any one of the 467 towns where we undertake to collect bills.

Q. Do you require three names on all the bills you discount?

A. The statutory rule is that bills must have three signatures, but the bank is also authorized to accept paper bearing only two signatures when the third signature is replaced by a deposit of securities belonging to one of the classes of securities admitted for loans or by a warrant for merchandise (warehouse receipt). At least two signatures on a bill must be given by parties domiciled in France.

Q. Is it necessary that one of these signatures should be that of a bank?

A. That is not necessary.

Q. Does your annual report show the average life of your bills?

A. Yes. The last statement of operations indicates for the year 1907, — 26 days.

Q. Does the statement of your operations give the average size of bills in your portfolio?

A. Yes, the average value of discounted bills in 1907 was 735 francs, in 1906 it was 683 francs.

Q. Do you allow overdrafts or do you make advances of the kind made by the Scotch banks, called cash credits?

A. The law does not permit any overdrafts.

It was also pointed out that any depositor with the Bank of France may discount paper in as small denominations as 5 francs; also that the Bank of France has a monopoly of the issue of notes which may be legal tender. Those notes are se-

cured by the bills discounted, as shall appear in the chapter on Banking.

INTERVIEW WITH THE ADMINISTRATOR AND
WITH OTHER OFFICIALS OF THE
CRÉDIT LYONNAIS.

Q. Will you describe the character of the items constituting your portfolio of bills discounted which amount to about \$211,000,000?

A. The bills discounted are commercial or industrial bills, representing normal transactions and having satisfactory signatures as drawers, drawees and endorsers.

Q. With two names or more?

A. Always at least two, often three or four signatures, but never only one.

Q. What is the size of your bills discounted?

A. It is very variable, the average is perhaps about 600 francs.

Q. While you do not accept a bill with one name, you sometimes arrange with your customers to extend credit to them without guarantee, or without collateral?

A. Yes, that is quite right.

Q. Can you give us an estimate as to the average life of bills discounted?

A. The average maturity of the paper which we purchase daily is about 55 to 60 days.

Q. Does the Bank of France rediscount bills for the other banks in France?

A. The Bank of France rediscounts all bills when the person presenting the bill is admitted to discount and when the bills have the necessary three signatures, have less than three months to run, and are payable in cities where the bank has a branch.

Q. You regard that item of bills discounted as your practical reserve because of your ability to rediscount the bills at the Bank of France?

A. Yes, bills discounted and cash are, for an establishment such as ours, the most essential part of our liquid assets.

Q. Let us take up the question of discount rates. Do your large banks follow the Bank of France?

A. We have two discount rates — that of the Bank of France, which is the official one, and then the rate outside the Bank of France. At the present moment our discount rate is one per cent, the official rate being about three per cent.

Referring to overdrafts which the Crédit Lyonnais allows.

Q. So that in fact they are what we would call overdrafts; they are funds advanced with or without security?

A. There would generally be security: it is only with very good customers and exceptionally that securities are not required.

Q. What dividend do you pay?

A. Eleven per cent.

(The Crédit Lyonnais deals in securities.)

The Comptoir d'Escompte, which deals with small tradesmen, will not discount paper without at least two signatures.

The same is true of the Crédit Foncier de France.

INTERVIEW WITH A CHIEF OFFICIAL OF
THE CRÉDIT AGRICOLE.

The Crédit Agricole deals especially with farmers. It arranges for them long time loans or short loans with the privilege of renewal. The security is a mortgage on land and collective liability on the part of many men interested in the loan, or else in the case of an individual farmer a note drawn on himself and signed by an officer of the Crédit Agricole, which is a co-operative and mutual institution to which the farmer belongs. This institution greatly aids the wine growers. No paper is taken by it unless it has the two signatures, the maker and an officer of the Crédit Agricole. If the Crédit Agricole has no money to lend a second officer endorses it to give it three signatures. It is then taken to the Bank of France and discounted there.

Germany.

INTERVIEW WITH THE OFFICIALS OF THE
REICHSBANK.

Q. You have in your statement bills discounted \$221,000,000. Will you kindly describe the class of bills constituting this item?

A. The law prescribes exactly the kind of bills the Reichsbank may take. They must not exceed three months in time and there must be on the bill the names of at least two parties known to be solvent.

Q. Are the bills secured or unsecured?

A. They may be unsecured.

Q. Would the Reichsbank discount a bill drawn by one merchant and accepted by another?

A. Yes. The Reichsbank is not only a bank for banks but for the commercial and industrial enterprises of the Empire.

Q. Do you show what percentage of bills are secured?

A. No. It is the exception to have collateral because the bill is considered on its merits and accepted accordingly.

Q. Have you any statistics showing the proportion of bills with two names and with three?

A. No.

Q. What is the smallest bill the bank will discount?

A. We have no minimum. We discount bills as low as 10 marks.

Q. Upon what kind of a bill does the farmer secure an advance from the bank?

A. He sells his produce, draws a bill upon the purchaser, and takes the bill to the bank as any other man would do, or a bill might be drawn upon a farmer and accepted by him.

Q. When he borrows money in the spring with which to buy seed, how does he secure the cash?

A. He goes to his own bank for that. There are co-operative societies for this purpose, which are a great factor in Germany.

Q. Will the manager of a branch of the Reichsbank renew a farmer's three months' bill if desired?

A. Yes. An exception is made for the farmer. Other bills are not renewed.

Q. Are farmers required to maintain a balance in order to secure accommodation?

A. People who hand in bills for discount are required to keep a satisfactory balance.

INTERVIEW WITH THE OFFICIALS OF THE
DEUTSCHE BANK.

This is a private bank paying twelve per cent dividends. It does not do much of a straight bill discount business but allows overdrafts or accepted bills, chiefly with America, Russia, etc. What business is done by discount is through receivables.

All of these banks deal largely in collateral loans, as do the French and English banks, chiefly on approved stock exchange and Government securities.

INTERVIEW WITH DIRECTORS OF THE
DRESDNER BANK.

This is a private bank paying seven per cent dividends.

Q. Will you kindly describe the item "Bills Discounted" \$51,000,000?

A. The bills constituting this item are what we call prime and merchants' bills, running to ninety days, with an average maturity of from fifty to sixty days, and bear at least two good names.

Q. Are these bills secured or unsecured?

A. They are unsecured.

Q. Are most of these bills commercial bills?

A. Many of them are commercial bills.

Q. You regard your item of "Bills Discounted" as one of practical reserve?

A. Yes, it is immediately convertible into cash at the Reichsbank.

Q. We understand that your system here is such that when a merchant wants to borrow money for a legitimate purpose he arranges with some bank to accept his bill, which is discounted by another bank and which may be sold at any moment or converted into cash through the Reichsbank?

A. Yes.

INTERVIEW WITH THE SCHULTZE-DELITZSCH
CO-OPERATIVE CREDIT SOCIETIES.

These societies are for lending to their individual members on the liability of all members.

Q. For what periods would the Schultze-Delitzsch Societies loan money?

A. Usually three months.

Q. What class of paper do they take in making advances?

A. They make loans in the form of cash advances or in the form of discounting bills of exchange.

Q. By cash advances you mean cash credits?

A. Yes, they give cash against the obligations of their members.

Q. How are these advances secured?

A. Mostly by a guarantee of another member of responsibility, or by endorsement, or by a mortgage as collateral.

Q. They will take two name paper?

A. Yes. They buy single name paper or extend cash credit against single named obligations with security or mortgage.

The Canadian System.

The Canadian Banking System is more like our own than is that of England, France or Germany; yet it has absorbed much of the spirit in foreign banking and contains different practices from those found in the United States. Branch banking is extensively carried on, with the result that practically all the banks are very large banks and are able each one of them to do most of the banking business called for by any one customer. This has built up a very close feeling between bank and customer, a considerably closer feeling than exists between bank and customer in this country. Businesses are guided more in Canada by the banks than they are with us. Most busi-

nesses use one only, rarely more than two banks, and largely adopt their finance to the suggestion of their bank or banks. This association is strengthened by a power given the banks in many cases to claim title to the merchandise of the borrower during the life of any borrowing from the bank by the customer. The merchandise, unless in the form of warehouse receipts, is not given, but an assignment of stock is given to be used if the bank considers matters going in a wrong direction. Borrowings, too, are arranged for at the beginning of a season for the whole season at a certain rate, not from time to time as need arises. That is, a bank says that such a company may have a maximum of credit and at such a rate, uniform for the drafts as they shall be presented. No other borrowings may be entered into without the knowledge of the bank. In the farming districts of Western Canada the banks lend to farmers on their straight paper unsecured by mortgage, but not to buy land or to put up buildings, only to buy seed, tools, stock or for wages, etc. The Western Canadian farmers are successful, a fact which, coupled with the purpose of the loan, ensures their notes to the banks being good.

We Seem Lax in Our Finance.

In almost every country lenders are more in touch with the assets back of commercial paper

than are the banks of the United States. Our method is to discount, as a rule, the single name paper of the borrower. This is perhaps a satisfactory form of borrowing in the case of the borrower's own bank or banks when the condition of the borrower can be kept closely in touch with. In the larger field, however, of borrowing through many sources at a distance from the place of business of the borrower, where lenders can be only moderately conversant with the condition of the borrower, such forms of borrowing, unless on an evidently sound basis, raise a large number of questions. Most of our commercial paper offered through responsible channels is a safe investment; but to ensure safety in commercial paper, where there is obviously much chance for leakage and unfair play, a number of specifications must be complied with to make this paper attractive; more now than should ultimately be necessary. We have been lending on commercial paper in this country fully as freely as have the banks in England, France or Germany; but on paper which is not nearly so well secured. In consequence, though commercial paper, owing to good business conduct, is generally in good repute, there are far more failures of it to bring payment at maturity than there should be, an amount which in volume is considerable. To protect themselves from such disaster American banks are now demanding that borrowers show a larger margin of safety, greater in fact than should be necessary.

Borrowers Should Show Their Strength in the Form of Their Borrowing.

It would be better for the borrowers if they should make the form of their borrowings as attractive as possible to lenders who cannot well be intimately conversant with their condition. By so doing they could gain broader credit without injuring their own business opportunities. Occasionally they might not be able to gain credit where in the other case they could obtain credit; but as a rule in such cases it would be better for them not to obtain this credit. In cases where credit is deserved, by using some such method as borrowing through receivables or other distinctly double liability paper, supplemented by audited statements and by detailed information as to condition, lenders are far more ready to lend than they are under a vague form of borrowing. The result is that having shown the power back of their paper in the paper, the borrowers do not have to maintain so large a margin of safety in their business, to satisfy the lenders. In other words, borrowers have more free capital for their business.

We Should Use Paper that is as Strong as Receivables.

The reason that we quote at such length on this subject, is because the lenders and the borrowers of the United States must adopt some method

equivalent to the English or Continental system of discounting only "receivables" or other bills on a firm basis, before our reckless booms and severe panics can be eliminated. In addition to the increased security to the lender on such paper, the English system tends to prevent the borrower from becoming overextended and thus tends to prevent the entire nation from becoming overextended — a matter which would be a great blessing to the United States. In other words, as our country adopts some such system, the areas above and below the line of normal growth on the Composite plot of Business Conditions (herewith inserted) will gradually decrease in altitude and depth respectively and will tend to diminish in size. Moreover, with the additional security afforded by accepted bills over the ordinary one name paper, all persons with capital will feel inclined to study fundamental conditions more closely, knowing that they can at the proper time safely and independently lend their money direct and not be so dependent on either banks or short time notes. As the number of those who study fundamental conditions increases, and as more capital is kept alternating between fixed and liquid assets, this will still further tend to prevent overextension and to eliminate both the inflated and the depressed areas, above and below the nation's line of normal growth.

The Growth of Our Present System.

In analyzing any situation, history is of importance in showing from whence present tendencies come. It is important to know why this country has adopted the single name paper system to date so generally, rather than another. Prior to the Civil War the United States used notes and bills payable to close credit. These were used through endorsement to obtain bank credit and became much like the receivables of which so much is heard in England and which have been held up to us in this country as the most desirable form of commercial paper. Credits were long in those days, from four to eight months; in the dry goods trade, for instance, eight months. Owing to the fact that when these receivables were discounted they were paid for by the banks in bank note currency, which owing to our state banking was in poor repute, retailers, when they could, soon got the habit of selling their merchandise "on account." They received their pay either in country produce or in the products of the home manufacturing industries which were so prevalent at that time. "I have often heard old merchants say," Mr. Edward D. Page says, "that in those days a general store was often conducted in such a way that one or two dollars of cash was often as much as they would use in a week's trade. This, of course, did not mean that their weekly sales were limited to this trivial amount; but that the

bulk of their business was done with people whom they trusted, and whose raw products were bartered against their manufactured stuffs.”¹ As business grew, however, larger business and the Civil War put an end to this system. Neither seller nor buyer would take the risk of open accounts receivable. Retail business went on a cash basis.

On the resumption of specie payments after the war, open credits again lengthened quickly. The custom of selling on open account had become so established in earlier days that when credit was allowed once more it took this form and few notes appeared. Moreover, increased deposits in Eastern banks had brought a limited demand for single name notes of some of the strongest houses both East and West. The banks had at first found a safe investment “in time drafts made by Eastern manufacturers and accepted by selling agents as a sort of double name paper. The demand for money, however, was much greater than the legitimate supply of this paper and banks soon found that such paper did not represent real transactions or real credits arising from sales. Meantime, the large discount given by the Eastern mills in the dry goods trade for cash led to a demand for money with which to take advantage of such discounts from Western distributing houses. The

¹ The authors are indebted to Mr. Edward D. Page of Oakland, N. J., for a letter relative to the development and use of single name paper.

strongest of these soon found that they could sell their single name paper at a rate from one-half to two per cent higher than that commanded by Eastern endorsed notes. Whenever they could obtain a discount of 18% for cash, as was often the case, there was a large profit for them in selling their notes at six or seven per cent. Besides this, in buying for cash there was always a manifest advantage in the way of price. When once this habit of buying became established, Western single name paper soon became standardized, and no longer needed an endorser, and commanded lower rates of discount."

"The reason why business did not get back to the bills receivable basis of settlement was on account of the large optional discount offered to ensure the payment of cash during the war period. The reason credit has stayed in the form of open account is because of the substitution in the sale of merchandise of the implied warranties for the doctrine of caveat emptor, let the buyer beware. This in turn is due largely to the change in business customs due to the introduction of commercial travelers. Our country is very large and with the rapid expansion of trade in the years following the war it readily appears that this system was of great advantage. To the buyer it gave a guaranty of goods purchased, and to the seller it brought greatly increased sales. Mr. Page says, 'In the dry goods trade the first regular drummers going West at frequent intervals started

from New York in the early eighties, and the result of their efforts was to substitute sale by sample for the personal inspection and selection of the goods purchased. It is obvious,' he goes on to say, 'that there can be no fixed settlement at the date of sale for merchandise sold on credit, which is subject to all sorts of claims, reclamations and rejections, such as is the case today with a large part of the goods shipped from the manufacturing industries to the distributor. So much time is occupied in transit, and so much time necessarily elapses before the merchandise can be examined that the purchaser can no longer, at the time of purchase, give his note for the amount of the bill and close the transaction: Changed customs have made a reversion to note settlement impossible, except in a few trades dealing in standardized articles or where goods are sold as they are at auction, absolutely without reclamation, which, however, is only a comparatively small part of sales on long credits.'"

It is for these reasons that single name paper in this country became our standard, and it is because our great country is still growing rapidly that this system has continued as it has. It seems probable with our economic conditions as they are, and important as it is that this receivable method of borrowing shall be adopted whenever possible, that to improve the commercial paper situation the chief stress must be laid on improving the basis for the issuance of single name paper. In other words,

theoretically it is well to talk about "receivables," but practically we had better study single name paper a while longer.

Note Brokers.

An important factor in the usefulness of commercial paper is the ability of note brokers to distribute that paper. The note broker is a middleman through whose hands passes much of the commercial paper issued in this country. Excepting where a borrower is dealing with his own banks, by far the larger portion of that immense amount of financing done through the medium of commercial paper to carry on the mercantile business of this country, is done through note brokers.

Note brokers in this country have also in part brought about the present form of commercial paper. Because they cannot afford to have a minor form of borrowing interfere with the larger one in which they are involved, having adopted the placing of single name paper they have done much to force any other form of similar finance off the market. They cannot afford to let trade notes, for example, be discounted. To do this would let a large volume of receivables or preferred paper over the straight single name paper appear on the market. This volume of double name paper would necessarily confuse and hurt the sale of the single name notes, and in consequence brokers have insisted that their customers borrow in the market

and then take advantage of trade discounts and pay for their merchandise soon after receipt.

Looking at this method broadly it is correct; but it probably does away with many real receivables which in the case of some comparatively small companies could be made the chief medium of their borrowing, and which from the lender's standpoint would be preferable to their single name paper. If these firms financed their needs through notes which became receivables, they could probably pay their merchandise debts in the long run at as low an interest cost as they do now. In the case of true receivables it might be that the seller of merchandise would exact a tax of some sort on the buyer for the putting of his name on the buyer's paper, in order to have it discounted. On the other hand, the paper could be so much more readily discounted with the two names on it that this tax would probably, in most cases, be made up for in the rate at which the paper could be placed. If some such method of finance were generally practiced, competition between manufacturers would soon bring cost to the buyers down to where it is now. As has been shown previously, this method of financing through two names is current in England, works very well there and has very many advantages over our present one of single name paper.

The Service of Note Brokers.

The note broker arose, first, because of the fact that there was no central method of finance; secondly, because, owing to the size of this country, and lack of available capital for the needs in any one part, the note broker's facility in shifting his available supply of paper to the easiest money market aided the borrower very considerably; thirdly, because, owing to the newness of this country and its crude method of finance, borrowings through commercial paper needed additional checks over what the final lenders themselves could give. As an equilibrator in the supply of money in different parts of the country and as a checker of credit, the note broker is serving an excellent economic purpose. There has been to date no central discount market, and the note broker's activity quickens very much the equalization of rates between different sections. He also aids greatly in building up the business of the territory most in need of capital.

Whether the note broker buys his paper outright or simply offers it on knowledge that it can be obtained on request, he does much to help the financing necessary. If however he buys this paper, making direct advances against it in cases where general offerings are made, he is much more apt to investigate the conditions under which the paper is issued than he otherwise is. Buyers of commercial paper through note brokers should in

all but exceptional cases, therefore, take advantage of the additional check on credits by making sure that the brokers offering the paper have advanced on it themselves or stand ready to advance on it.

Most borrowers will find it best to borrow through one broker, but if, for some reason, two houses must be used, the buyer of the paper should assure himself that his broker has a thorough knowledge of the amount of borrowing that is being done through other houses by the firm in question.

The Position of Note Brokers is Likely to Change.

As this country grows older and richer, and as business becomes more conservative and not forced to such a breakneck speed to keep pace with the opportunities which are constantly being opened, the service of note brokers will change. There will be fewer of them, probably, and those few will be the ones with the largest capital. They will be required to buy their paper with the greatest care, and if not as in England to endorse it, they will assume more than they do today the position of the English, French and German banks, which accept paper for a commission and then let it go on to some other lender. It is the province of the note broker almost as much as it is of the banks to safeguard the giving of credit and where possible to remedy a state of affairs in which much commercial paper is not issued with proper

authority. Note brokers have done a great deal along these lines and their service in this connection is constantly increasing.

Cotton Bills are an Example of Our Problem.

An example of what is likely to develop in the forms which commercial paper will take in this country under our new banking act is seen in the financing of cotton bills. The English banks which supply much of the money for this financing have demanded that other vouchers for the cotton shipped be given with the notes by which the shipments are financed than railroad bills of lading, in which or under which many errors occur. It is suggested that the railroads guarantee the bills of lading or else that some substantial capital be proved to be back of the bills of exchange. This is a perfectly proper demand. As it seems unfair to bring the railroads into the matter other than to accept their bills of lading as they stand, for collateral, it would seem best that some sort of endorsement be given the bills of exchange. Many able men believe that to have this done would end at once a loose method of finance, which at the best does not lend distinction to this country. Many men are of the opinion that once this endorsement were given the bills, they could very largely be placed so advantageously that the decreased cost in interest would more than make up

to the borrowers the cost of getting the endorsement.

Careful Finance Will Prevent Severe Panics.

Notes which everybody knows are perfectly safe can be placed without the need of much outside assistance. There are but few note brokers of today who could play a very large part in the financing of the cotton crop if the cotton bills of exchange or notes for cotton were financed through bank or other strong endorsements. So in other lines of business. Just now we are all imbued with a great desire to take risks, and in consequence it will probably be a long time before any general method of finance of merchandise in business, as is suggested for foreign sales of cotton, is current here. The sooner it comes, the better, however, for though we may go ahead a bit more slowly under it, the delay will not be great and the gain made in decreased interest charges and in insuring that our liquid capital shall be kept liquid, together with the aid this will give us in lessening the severity of further panics, will more than counterbalance our loss.

Registration of Commercial Paper is a Help.

There is a movement on foot at the present time for the registration of commercial paper with

some responsible agent such as a bank. That is, a borrower registering his commercial paper will go to the registering agent with his by-laws and other data showing his authority to borrow, and will ask the registering agent to number and to endorse the notes after investigation, to the effect that the registering agent thereby states the notes of a certain firm, Nos. A to X inclusive, are issued with authority, and, if any amount is specified, that they do not exceed the amount of borrowing authorized. To the buyer of paper such registration has many obvious advantages. It will make borrowers far less careless as to the form of their notes; through the fear of open criticism it will make them hesitate to borrow beyond their plain needs. It will largely make public and give the advantages accruing from publicity to their borrowings against merchandise.

Registration is Not the Best Remedy.

The borrower, however, apart from the check he will receive on extensive borrowings, will find often many disadvantages in such a system of frequent registration of his paper. It may disclose at once to many eyes the volume of his yearly business, his need or lack of need for money, and many other things which, although he may be doing a perfectly legitimate business, he does not want outsiders to know. The registering agents,

however honest they may be, can hardly withhold this information from all. If even the directors of a registering bank have opportunity to look over a list of the bank's registrations, it may do harm. Too often, bank directors do not feel the moral obligation towards the customer of their bank that they should. To require generally registration of commercial paper would do much good, but would bear unduly hard on many legitimate borrowings. The system does not strike at the root of the evil. If a need for it exists, it shows a rather pitiful condition in the issuing of commercial paper. It points to lack of understanding of the proper use of commercial paper, general extension of credit, and dishonesty. If we really have to deal with these things, let us go deep enough to cope with them in body and not use a superficial check on them, which at the best must be crude in its operation. Furthermore, let us continually emphasize the necessity of recognizing the Law of Equal Reaction. Only when both borrowers and lenders plan their operations in accordance with this law can conditions become truly satisfactory.

Most of Our Commercial Paper is Good.

As a matter of fact, most commercial paper in the United States is good and is issued on a sound basis. Some are too apt to emphasize errors that

occur in it as expressive of its general condition. Many errors do occur, more here than in other countries, and we should, if possible, devise ways for cutting their number down; but at the most, though their volume may be fairly large, their average is only a very small percentage of the total amount of paper discounted by lenders with any competency as to judging credit. We have to guard against many chances for error which we must recognize as existing, but lenders need have no fear of not being able to find in the general commercial paper market a sufficient supply of good commercial bills to discount, in any but exceptional times. Lenders must pick and choose carefully, that is all, and pay attention to certain rules for buying paper, that under a different system would not have to be laid down. When borrowers recognize the importance for their own sakes of avoiding improper finance, as they would avoid disease, a much healthier condition, with far fewer errors, will exist. In the meantime, the commercial paper market in this country offers a most profitable field for bank, individual and corporate investment.

The Amount of Commercial Paper Outstanding is Enormous.

Loans and discounts are given for our National banks on January 7, of a recent year, as \$5,402,642,351.82. If we suppose that forty per

cent of this amount is in commercial paper, and that the average length of that paper is five months, we see that approximately \$5,186,536,657.75 of commercial paper is discounted every year by the National banks alone. When we realize that the data taken was before much of the crop money had found its way back to the banks and was available for discounting commercial bills, we see that this is a conservative estimate of the paper taken in this way. To be added to this amount is the paper discounted by trust companies, state and savings banks. Taking this amount as a third of the other we have \$2,881,409,254.30 as a total amount for commercial paper discounts in this country at one time. This is a very large sum, sufficiently so to warrant great attention, both as to the amount and as to its adaptability for its purpose as a means of raising money and as an investment.

Commercial Paper Proves of Great Assistance in Panic Times.

During a recent panic an official of a great Chicago bank said that he did not know what he would have done if it had not been for his commercial paper which matured during this panic and from which he received his money. This was the case, doubtless, with many, and it is the way it ought to have been with every bank. As a matter of fact, however, much of the commer-

cial paper outstanding at the beginning of a recent panic and maturing during it was not paid in full, if at all. This was not all the fault of the makers of the paper. There was no sale for commodities except at enormous sacrifice and holders of them for their own salvation had to beg assistance of the banks holding their paper to renew at least part of the paper held and coming due. This the banks as a rule very properly did, one-half being the proportion usually allowed for renewal. If this had not been done, enormous trouble would have occurred. This panic was serious enough as it was; but it verged on something that was terrible and to which what occurred was nothing. Only broad-minded finance on the part of bankers throughout the country saved the day. Commercial paper appeared well during this crisis, but it ought to have appeared even better than it did.

Commercial Paper is, Next to Cash,
a Bank's Most Liquid Asset.

To show of what great service commercial paper was during past panic periods and also in how good repute as a medium of finance and investment commercial paper is among those who know its virtues, the writers quote from an address of Mr. J. Herbert Case, of Brooklyn, N. Y., published by Messrs. Hathaway, Smith, Folds & Company.

“While perhaps no two bankers agree precisely upon just what constitutes the ideal investment for any given sum, say ten million dollars, I am strongly of the opinion that the one who employs the major part of this in short term loans to our merchants and manufacturers upon their notes, whose issuance is based upon those live and moving inventories of products in the course of manufacture — or current assets — rather than upon the instruments used in manufacture — or fixed assets — is and always will be upon a much more sound and liquid basis than he who largely invests in bonds and stocks which simply represent a participation in the fixed or immovable properties that cannot be liquidated at all, though the securities themselves may be subject to transfer. The proof of my contention may be found in the enviable record of our so-called purely commercial banks, which in the time of every disturbance and in the time of every crisis have best withstood the strains. What does the commercial bank do in the matter of investments? It puts practically all its funds into these short term notes, notes backed by the credit of the maker and secured by everything he has, but specifically and particularly by his always marketable products which are constantly passing through his hands on their way from producer to consumer, being continuously and automatically converted into cash. In other words, the commercial bank invests largely in what we term commercial paper.

“As to the manner in which these notes are paid, a prominent and reliable firm of note brokers of whom I recently made inquiry, informed me that during the first twelve days of the money panic of 1907 — at its very peak — they had maturing through their office something more than ten million dollars worth of bought paper, every single dollar of which was promptly paid without renewal. It does not require any wild flight of the imagination to believe that the money so received by the holding banks looked mighty good to them at that particular time. Can you imagine ten million dollars worth of securities, or in fact any other form of loans or investments, being so readily converted into cash in the same period with so little trouble and upon so favorable a basis? One of the old line trust companies in New York, whose reputation for conservatism is proverbial, show in their recent published statement a deposit liability of about thirty-five million dollars. Their assets, a most interesting exhibit, show over six million dollars in cash and something more than sixteen million dollars in Bills Purchased, an amount approaching 50% of their total deposits. The officers of this company have, I am told, expressed themselves as believing this to be the best and most liquid asset they possess. Moreover, during certain months of the year they undertake to have maturing each business day about two hundred and fifty thousand dollars of bought paper.

"Only a short time since a director of a prominent Wall Street bank, a large purchaser of commercial paper, personally told me that the president of his bank had recently tabulated the amount of its purchases of outside paper made during the past ten years. What do you think they found? The paper so purchased aggregated the enormous sum of seventy million dollars, every single dollar of which had been promptly paid when due, with the exception of one five thousand dollar note which was temporarily 'hung up' owing to the business being liquidated, although fully 50% had been received on this. Think of it. Seventy million dollars in outside paper purchased in a period running over ten years, with a loss so small that it is scarcely worth speaking of.

"The banker who has in his portfolio a goodly proportion of his deposits, say 30% to 40%, invested in a choice line of high grade commercial paper of standard names, notes carefully selected, bought in the open market *without the slightest obligation of renewal and having large current maturities*, occupies a much stronger and more enviable position than his brother banker, who, in order to get something more than a mere 'note of hand' as he expresses it, has an equally large percentage of his investments in high class stocks and bonds, all of which, however, are, as we have shown in the last analysis, based upon nailed-down, immovable assets, whether represented by a

certificate of stock of one of our standard railroad lines or by the mortgage bond of the railroad or other sound corporation."

It is to be remembered also that in August, 1914, when the stock exchange was closed and when there was a moratorium on collateral loans, it was commercial paper, and commercial paper practically only, that proved a liquid asset.

CHAPTER II

THE SELECTION OF COMMERCIAL PAPER.

WE have seen that commercial paper, if it is properly issued, is one of the safest forms of investment that can be had.

We have also seen that unless commercial paper appears in the form of true receivables, that is, notes bearing the names of two responsible and distinct parties to a transaction in merchandise, or unless it appears to be very carefully protected, it is difficult to guard against poor commercial paper. An enormous amount of commercial paper is in circulation, practically all of it good at bottom, but with a tendency in much of it to represent transactions which may not arrive at maturity in time to pay off the notes when they fall due. Too often, also, commercial paper in this country represents transactions in which there will occur absolutely unnecessary loss.

Rules for the Buying of Commercial Paper Have to be Very Conservative.

It is now our task to lay down certain laws which should provide for the selection of commercial paper as it exists with us today with safety, without proving too great restrictions on

the borrower. Rules are always a momentary drag and they are things to be avoided if possible. Often they bear unduly hard on certain people governed by them; but they have to be made sufficiently wide to cover all classes, and this should be borne in mind by those on whom they fall and who do not need them. Rules for the safe buying of commercial paper must necessarily be especially conservative, for they have to protect as nearly as can be those who lend what is apt to be their own and other men's dearest asset, money.

Where Possible Every Case Should be Considered on Its Individual Merits.

The following rules cannot insure absolute safety, nor can they be made hard and fast. Every case should be considered individually as much as possible, especially where commercial paper is presented for discount at the borrower's own bank, where intimate knowledge of the borrower should guide more than anything else the amount of credit to be extended. For the general purchase of commercial paper, however, particularly in the case of lenders who cannot have an intimate knowledge of the borrowers, the following should suffice to insure the buying of paper with the confidence afforded by other forms of investment, and at the same time not offer restrictions which will bear too heavily on the borrowers. The disregarding

of any one of these rules should occur only with certainty as to conditions in the mind of the lender.

(a) If possible buy real receivables.

There is so much commercial paper in the market that is good and that is not in the form of receivables that it may seem an undue restriction to limit at first the purchase of paper as largely as is possible to this class, but there is no better method of proving the worth of paper than by finding a strong firm or corporation which is not the real borrower ready to endorse that borrower's note. Not only does this endorsement act as a check on the goodness of the original note, but it brings with it usually at least as much strength again as the original name carries. Such paper in our market, therefore, is like the prime bills current in England, which bear the endorsement of some powerful bank. These receivables would not be classed abroad as prime bills; but comparatively speaking they appear as such with us, and they should without question claim a lender's first attention whenever they are offered. *It should be noticed, however, that commercial paper having the endorsement of a firm or corporation which controls the original maker of the note, may not be as satisfactory as paper which carries the names of two separate and distinct mercantile companies. The wheel within a wheel system should be watched, if not guarded against.*

Under our new bank act, banks joining the

Federal Reserve System may accept paper. Such bank endorsements should be classed with the best commercial paper.

(b) In buying other than local commercial paper, buy through an accredited agent such as a note broker in good standing.

Good business is the taking advantage of opportunities with the least possible risk. When it is possible to choose investments in commercial paper which have been passed on by a competent judge of credit, one whose business it is to specialize in picking out the best notes that can be obtained for the market, and whose success is largely dependent on the reputation made by such selection, it is foolish not to take advantage of such judgment and to pass over offerings made through this source in favor of paper offered by untried judges of credit. In buying paper a purchaser should always, if he cannot have a personal acquaintance with the conditions under which it is issued, take paper which comes from a bank or a reputable and tried note broker only, who has passed on it. There is plenty of such paper that is available and there is no need to go outside of this field. If possible, too, the purchaser should make sure that unless for some obviously good reason, the broker offering the paper has himself had faith enough in the note to advance against it. If the paper has been registered with some bank, all the better.

(c) Make sure that the men connected with

the firm or corporation issuing the paper be known to have absolute integrity.

There is no rule in the selection of commercial paper which is more important than this. In order, it comes third, but not so in relative importance. On the integrity of the men issuing the paper in question the ultimate payment entirely depends. Without honesty, ability and shrewdness go as nothing. If purchasers of commercial paper are to be at the beck and call of dishonesty they are entirely without protection. There are many chances for error, as we have seen, in our present method of finance. It is satisfactory, if made use of with good intent on the part of the borrowers, to conform to its proper laws and if that intent is carried out, not otherwise. Any borrower who has a history of fraud or semi-fraud should be looked into most carefully. The first question that a possible buyer of paper should ask is if the moral risk in the note offered is all that can be desired. The lender should not only ask this question, however. He should assure himself by every possible means that such is the case. He should ask for references and should check them up, and he should inquire at considerable length through sources other than those given as references regarding the personnel of the company borrowing. Fraud is the one thing which it is hard to guard against in business. Protection from weak or faulty business methods can be had fairly easily, but not against wrong-doing. As

a matter of fact it will be found that most of the losses in commercial paper come not from poor business methods, but from lying or other forms of dishonesty.

(d) The firm or company issuing the paper offered should be proved to have been successful over a period of years under its present management.

There is a tremendous impulse for rapid advancement with us, which is as it should be; but this advancement should at first be watched carefully by those competent to judge of and guide its progress. This guidance is one of the chief duties of bankers, who are necessarily tried business men of large caliber and with many resources as to knowledge of conditions. A new company should at first be financed by banks which it selects as its own, and it should not for a time be allowed to force itself on the general public for aid in financing its projects. Moreover, there are few companies which can afford to plunge headlong on a large scale into the business world. Some department stores, for example, managed by competent men, may be able to do this successfully; but even with them it will generally be found more advantageous to begin on a comparatively small scale and feel their way up along the lines of least resistance. Certainly it is the rule that the most successful businesses are those which have done this, and it is the exception where they have not. As buyers of commercial paper

wish primarily to select the strongest businesses to lend their money to, they should pick out the paper of those which can show a creditable record over a considerable term of years. As, too, a change in management of a company is apt to be a critical moment in a company's affairs, buyers of commercial paper should if possible take only the notes of those which have been under a tried management for some time.

(e) Buy paper of companies and firms dealing only in staple commodities, for which there is a steady demand and which are not luxuries. If the company or firm deal in other than such commodities an additionally strong showing should be required.

Since the proceeds of commercial paper are to go into merchandise which is to be sold or which can be sold, presumably at a profit, before the maturity of the notes given to raise the money for it, the goodness of the paper is dependent on the chance for the sale of the merchandise for a sum at least equal to the amount borrowed. Hence paper which has back of it merchandise for which there is a steady demand, and which is little likely to fluctuate in value, is the most satisfactory paper to select. Merchandise which may rise greatly in value is usually to be classed as speculative, and hence is as likely to fall in price as to rise. Paper given for such stock in trade should, therefore, show a far larger margin of safety than that carried by staple commodities. Compare paper issued

for wool with paper for a special print in cotton cloth which is momentarily the fashion, or with paper issued to purchase or to carry shoes of a special make for which there is a narrow market, or paper issued for automobiles. Paper issued for commodities which cater only to the fashion, or which are to be classed as luxuries, should be very carefully protected.

(f) **Make sure that the company or firm issuing the paper offered shows on a recent statement its notes and accounts payable covered by cash on hand, plus good notes and accounts receivable, and a margin of at least as much again in merchandise. Or, if cash plus good notes and accounts receivable do not equal notes and accounts payable, that there are at least two and a quarter in quick assets times the debt. If cash plus good notes and accounts receivable more than cover the debt, the margin of safety in merchandise may be slightly reduced, on the ground that cash or good accounts receivable are better protection for paper than merchandise. If there is a mortgage or other long term debt this should be covered by assets worth several times the mortgage or other long term debt, and in excess of the amount of quick assets specified for protection to notes and accounts payable.**

By a recent statement the writers mean one certainly within a year and much preferably within six months. Many firms engaged in certain trades, such as the handling of raw materials like wool or

cotton or grain, clean up or go out of debt in one season every year. Wool, cotton, grain and the like are commodities which can be secured only at certain seasons. They are purchased in very large amounts at this time and the rest of the year is spent in selling them. An attempt is usually made to sell all of these commodities purchased before a new buying season comes. Such firms as deal in these naturally make their statement when their condition is strongest, that is, at the end of their period of selling, and although if possible the debt at its height should be ascertained and compared with the merchandise covering it, this sort of a company liquidates so thoroughly once every year, and its merchandise is so salable, that a yearly statement should suffice. In the case of companies manufacturing heavy machinery or dealing in other than seasonable merchandise, a statement at least every six months should be required, so that the progress of the company may be carefully watched, and so also that the company may have a check kept on it from doing too much business for safety on its capital. To have a year pass without such companies as these making any return, is too long a period. Also, in the case of companies which for any reason have great delay in getting out their statements, semi-annual statements should be called for. *To have paper offered on a statement fourteen or fifteen months old should invite denial of credit.*

(g) Ascertain that the borrower is a student of fundamental business conditions, that he recognizes the Law of Equal Reaction, and is endeavoring to serve rather than exploit.

In the minds of the writers this is very important. Not only is "honesty the best policy"; but owing to the Law of Equal Reaction he who serves best profits most in the long run. In other words, character is a positive and constructive asset and should receive much more consideration in connection with the purchase of commercial paper. We would not think of loaning to an individual of questionable character; but we will loan to a corporation with little thought of the character of the management. Really we should give more attention to the latter case, for men will do questionable things "as a board" which they would never do as individuals.

It is a scientific fact that corporations ultimately get a reaction in accordance with their acts. If they abuse the public, they ultimately will get abused in return. If they conscientiously benefit the public, they will get a beneficial reaction in return. It is always possible to forecast what treatment a corporation is to receive from the public by studying its present attitude toward the public. Hence we say that this moral element should be given much more attention when purchasing commercial paper.

Cash Plus Accounts Receivable Should Cover Debt.

A going business will usually have a considerable amount of accounts receivable on its books. If the business has been in operation for some time, and if it has not any such accounts receivable, it will usually be for the reason that it is in a particularly liquid state, in which case it should carry large cash balances. Hence a borrower through commercial paper should be able to show on his statement a considerable volume of cash, or good accounts receivable. Any debt shown on a regular statement from notes and accounts payable items that exceeds the total of cash plus good accounts receivable, unless the margin of safety in merchandise is especially heavy, should be regarded as a sign of weakness. Such a condition will presumably bring the borrower to his borrowing season in an insecure position. If trouble comes, there are many demands for cash. Accounts receivable, good as they may be in fair weather, are likely to prove slower in liquidation than anticipated. Moreover, the sale of merchandise is far more difficult in times of general financial stress than when such a condition does not prevail. Trouble often comes unexpectedly, and the generous margin of safety that has been specified is none too much to expect borrowers to show in their regular statement. As a matter of fact lenders on paper should assure themselves that most

borrowers maintain this ratio of safety continually for their floating debt.

On Statements Showing Less Cash Plus Accounts Receivable than there is Debt, Two and a Quarter of Quick Assets to One of Debt is a Fair Ratio.

In cases where the merchandise items as to quick assets are relatively large, two and a quarter of quick assets, that is, assets which can be converted readily into cash, to one of debt, has been taken as a fair showing to be called for on an annual statement. As has been seen, in the case of a dealer in grain, wool or the like, which liquidate regularly, a particularly strong showing once a year should be exhibited. On the other hand, permission should be granted by lenders to such dealers to buy up to a much smaller ratio than $2\frac{1}{4}$ to 1 during the buying season. The ratio of $2\frac{1}{4}$ to 1, however, should be regarded as a fair ratio to be expected on the statement of the average mercantile company that does not show its notes and accounts payable covered by cash plus good accounts receivable. Most borrowers of this class in the open market, under our present system of commercial paper, ought to show this much. Where the merchandise involved is not of especially ready sale, and where the merchandise item among quick assets is especially large, a ratio of even greater than $2\frac{1}{4}$ to 1 should be demanded.

There are Some Exceptions to This Rule.

An exception is that of a company buying raw materials to fill contracts already taken or clearly in sight, for these contracts are practically accounts receivable. As there is presumably a profit in the contracts taken, such a business as this, if the contracts are good, is especially safe. Even if the contracts call for delivery some time hence, as much as six months, during which the raw materials must be changed by manufacture into a finished product, paper of such firms may be taken with confidence on a statement showing somewhat less than $2\frac{1}{4}$ to 1. Care should be taken, however, to make sure that the contracts are sound and that full insurance covers the merchandise until delivered. Packing house paper, which presumably has especially liquid assets back of it, may also be dealt with somewhat more leniently.

Most Borrowers Should Conform to the Rule.

In considering the statements of manufacturing companies such as mills, unendorsed by selling houses, or of selling houses endorsing paper of a mill which does not show a strong condition, or of department stores, dry goods houses, manufacturers, and the like, cash plus accounts receivable covering debt, plus as much again in other quick

assets, or $2\frac{1}{4}$ to 1, should be insisted upon. If possible, as has been shown, semi-annual statements making this showing should be obtained. The mere fact that a borrower must make such a showing will tend to keep him conservative. Yet this ratio does not call for so large a margin of safety as to endanger his business success. A yearly statement on the part of a manufacturer will be sufficient to make the borrower draw in at least occasionally. Semi-annual statements, especially in the case of companies dealing in merchandise difficult to sell, will tend to make borrowers able to make this showing practically all the time. The reason is that very few companies can extend themselves much beyond a ratio of $2\frac{1}{4}$ of quick assets to 1 of debt, and then draw in again to this ratio in time to make statements of such a condition every six months.

When Credit is Working Freely This Ratio Should Still be Required.

When credit is working freely and is apparently in good condition, especially when capital is scarce, a demand for the showing called for may seem to bear hard on the borrower; but it is in just such cases that the call should particularly be made. It is in the places distant from ready capital that such conditions exist. It is unfair for borrowers in these communities to expect lenders to send their money far from their sight on a showing

which represents a very much extended credit, even though that credit be apparently healthy. No matter what good opportunities exist, extension of credit is apt to break itself. In a new country, prices of commodities are apt to fluctuate very widely. To lend money in a new country or in an undeveloped part of any country, on a statement which shows a tendency on the part of the company to stretch its credit to the utmost, is a most dangerous practice. Much of the United States is new country. It has great opportunities. It has also usually too little capital for its business. Probably there have been more failures in this country from too great an extension of credit, that is, from doing too much business for the capital employed, than for any other reason. It behooves us to advance with our weight on our feet all the time. With chance for error in the security given commercial paper, and with a country showing wide fluctuations in the prices of its merchandise, 2 to 2½ of quick assets to 1 of debt is not a bit too large a ratio to be required at least once a year on a statement.

Liquid Assets are Essential.

A review of the business which paper under consideration represents, both in its broad and in its specialized aspect, is also of value. Mr. Edward D. Page said, in a paper read before the Pennsylvania Bankers Association, as follows: "In buy-

ing commercial paper prefer the business where there is normally a large proportion of fluid or automatically liquidating assets, and a small proportion of assets that are liquidated with effort, or with expense, or both." With this in mind, and as an example of the way in which paper may be tabulated, Mr. Page analyzed the dry goods trade into four classes, that of manufacturing establishments, that of retailers, that of jobbers and that of commission houses. Comparing the paper of these classes on the basis of average fluid assets, he finds that commission house paper comes first in rank, then that of jobbers, next that of retail stores and last that of mills.

Of commission houses, there are four classes (1) the selling agent with responsibility, but without capital actually invested in its business; (2) the finance or mercantile house which has no selling organization but simply advances on merchandise and cash sales made by its departments with which commissions are divided; (3) the commission house which owns its accounts receivable, guarantees sales and advances on merchandise; and (4) the class of commission houses who own the mills they sell from or are owned by the mills they sell for. Such subdivision of trades and the selection of commercial paper with reference to the comparative tabulation, on the basis of liquid assets and independent strength, cannot fail to be a source of protection in the buying of commercial paper.

A Bonded Debt is Sometimes Desirable for a Borrower.

Many mercantile companies need to borrow money for a considerable time. It is far better for such companies to fund their debt or to raise money by an issue of stock than by other methods. By issuing mortgage bonds they gain considerably. Many buyers of commercial paper feel that if a company shows a mortgage debt they should not lend on the company's paper. If the bonds are properly secured, this is entirely erroneous. As will appear in the chapter on Lending and Borrowing, bonds and commercial paper have very different fields and they should not be forced to coincide in any way. Briefly, bonds should be secured by three times their face value in a fair appraisal value of the fixed assets they cover. If such an appraisal is given as a fair salable value, not necessarily an immediate salable value, but one which should be obtained within a year if the need to sell arose, the bonds may be regarded as properly secured, provided proper depreciation charges are maintained, and provided the earnings of the borrower are normal. When bonds are outstanding, however, buyers of commercial paper should not purchase paper of companies in which the bonds mature within the life of the notes taken, unless arrangements have been made to pay the bonds off. Also, in the case of companies having bonds outstanding, purchasers of paper should

make sure that there is no question for the immediate future of non-payment of interest.

(h) Make sure that the statement of the company whose paper is being considered for purchase does not show evidently an overlarge amount of notes or accounts receivable, and make sure also that the merchandise shown as being carried is appraised at a fair market value.

In the analysis of a statement of a mercantile company, great attention should be paid to the item of notes or accounts receivable. If these are good they are an admirable asset, but an apparently undue amount in notes receivable should be investigated. It is presumed that the purchaser of commercial paper has a general acquaintance with the trade in which the paper appears and access to information as to the nature of the business being done by the maker of the paper. It is for the purchaser to make up his mind whether or not the company is carrying too many customers or is carrying its normal number of customers for too long a time. The notes receivable item is the key to the situation as to these conditions, and if it appears unduly large when compared with the notes receivable item in the statements of similar companies, it should be regarded as a danger signal. The danger is, of course, that when customers evidently are not paying cash for their goods, or when their customary notes or other forms of promises to pay are being let run for an unusually long time, there is a good chance that

the merchandise which is the real security back of the commercial paper of the firm in question is not being kept in as liquid shape as it should be.

The Merchandise Item on a Statement Must Represent a Fair Valuation.

That the merchandise item on a statement should represent a fair valuation speaks for itself. It is surprisingly often, however, that merchandise on a statement does not represent such a valuation, and buyers of paper should not fail to consider this item most carefully. It is a safe rule to require merchandise to be carried by the owner on his statement at cost when the market is equal to or better than cost, and at the market figures for the merchandise when the market is below cost. An exceptional amount of merchandise, as shown by a statement, should also be inquired into.

(i) Make sure that the statements shown be audited or come through persons entirely competent to judge of their correctness.

In a system like ours, where there is not the check on credit that the endorsement of a bank or of a second party to a transaction gives, it is practically essential that some competent and disinterested person consider the condition of the borrower most intimately. Even if the borrower is entirely honest, he may be carried away with his prospects, and like the real estate dealer, who

figures his worth at the highest prices his land will bring before he has sold it, mark up the value of his property without authority. There is a large chance for statements which are not set before a disinterested person for judgment to express a warped situation. For this reason a demand should be made that every statement shown of a possible borrower should be a copy of a signed statement, and that the statement be approved by a competent outside auditor. In addition, a note broker or bank, which has a full knowledge of the trade in question and of the company whose borrowing is under consideration, and who has really studied the value of the statement as a true representation of conditions, should pass on the statement. Too often note brokers and banks refuse to give such study as is necessary to a statement, simply passing it on as it comes to them. Brokers and banks who are found to do this should be avoided.

(j) **Make sure that the borrower keeps one or more bank accounts in a large city with banks which will vouch for the goodness of the company's paper.**

If the company in question is in a country town, at least two of the banks in its home town should vouch for it besides one reputable bank in a larger city. If the company is in a large city, at least two banks in that city should report favorably on it.

Home banks are among the best references a borrower can have. If a borrower cannot satisfy

his own banks of deposit that he is good and that he is deserving of credit beyond what they will give him, he should not be allowed outside credit. There is no danger that in order to profit themselves from his borrowings his own banks should report adversely on a borrower, for from the competition between banks of which he can always avail himself, a borrower can assure himself of the best treatment, often better treatment than he deserves. One of the banks of a borrower in the open market should be a well known city bank, for he should be vouched for, if he is in the country, by what a lender may be sure is an expert banker as well as by at least two bankers in his own town, who are specialists so far as a knowledge of the borrower's condition is concerned. The city banker has a little broader view than the country banker, as a rule, and his judgment should always be considered in matters of general finance. Moreover, local banks are apt to be overloyal to their own, and the chance for error in this direction should be reduced as much as possible. We are told to beware of the man of one book. *For the same reason one bank checking is insufficient.* A borrower should have at least two bankers to vouch for him, hence the rule that if he is in a city he should have two city banks to call his own.

Great care should be taken to recheck borrowers through their own banks each time paper is bought, even if checkings have been got only six or four

months previously. Conditions turn quickly and four months is long enough for a position to change considerably.

**The Person Offering Paper Should do
Most of the Detail Work of Investi-
gation, Presenting his Results With
the Offering.**

It may seem as if so much investigation as is here called for is almost prohibitive for busy buyers of paper. The note broker or person offering the paper should be obliged to present proofs of his recent investigations along the lines laid down when he offers his notes. If he is reliable his statement of investigation will be true and the lender can tell in a few glances if all is as it should be. It is better, of course, for the lender to make his individual investigations, but it should not be essential for him to do so. He should demand, however, that the investigation be made and the proper condition be found by others if not by himself.

(k) Make sure that at least two banks competent to judge of the credit in question and other than the banks which have the account of the borrower pass favorably on the credit of the borrower.

Too often banks which have the account of a borrower, when asked regarding the condition of that borrower, for fear of losing the account, state that the borrower is good when really they

know that he is stretching his credit beyond the point he should. For this reason, though if a borrower's own banks pass unfavorably on his credit, it is enough at once to justify denial of credit by outsiders, if they pass favorably on his credit it is not necessarily enough to prove him worthy of outside credit. The opinion of disinterested banks having knowledge of the situation should be obtained. This is the best possible checking that can be got and it should never be neglected. A composite checking which shall be wholly satisfactory is essential.

(1) Where trade references can be obtained, at least four of these, not over six months old, should be found to be satisfactory.

Many firms such as wool merchants, can hardly supply trade references, but all manufacturers who buy raw materials from other dealers can give such and should do so. The trade references should be looked up and the four showing the largest dealings should prove that discounts are taken advantage of and that the borrower is in good repute with these four dealers. Under the present system of discounting paper, which provides cash for the buyer of raw materials at once, there is no reason why expensive interest rates should not be avoided when discounts are available. If they are not taken, the borrower is not running his business properly or is not entitled to credit from others than those who can watch him closely. Owing to the rapidity with which

positions can change, these trade references should not be over six months old. Four of them is taken as a proper number to ask for as this is sufficient to show conditions clearly, and as probably most buyers of raw materials confine their chief purchases to about four dealers in these raw materials.

(m) Make sure that insurance is placed on all merchandise carried.

When a bank or individual lends against real estate, not only does the lender secure a mortgage against that real estate, but he retains fire insurance policies covering the real estate mortgaged up to its full value. A lender on real estate would be considered very lax if he did not demand such policies. The case is very similar with commercial paper. Collateral is not required to be given with the paper, but it must exist just the same; and if the need for it is there the need is there also for insurance covering it exactly as in the case of loans on real estate. Few lenders on commercial paper pay attention to this factor in the situation back of the notes they take. All should do so, for it is a very important element in their security. Some arrangement for blanket insurance covering the full line of merchandise carried should be shown by all borrowers through commercial paper.

(n) Secure as many endorsements of responsible men interested in the company borrowing as is possible.

Endorsements, even if they do not bring much financial strength, should insure a moral backing which all notes ought to have. With corporate lack of responsibility occasionally, at least, current, it is well to make sure that individual responsibility is fixed. If responsibility is fixed on individuals, even if they have no great means, *they are much more careful to protect interests in which they are associated than if their names do not appear in the matter.*

Care should be taken, however, never to buy a note because of an endorser only. Endorsements are usually weak ties between borrower and lender. If a note does not appear sound without an endorser, it should be discarded, even if a strong name is put on. Lend to the endorser direct rather than in this form.

(o) Make sure that a borrower through commercial paper keeps a satisfactory unused bank credit during his borrowing.

It is important that while paper is outstanding the maker should have a large portion of his borrowing power at his banks free, in case at the maturity of his notes or for the general protection of his business a need comes for a sudden borrowing power which cannot be obtained from the general financial world. What proportion this unused bank credit should bear to total floating debt is a matter for lenders to decide in individual cases, but it should be a generous one.

(p) The rate for the paper should be satisfactory.

This is the last and least important rule for the purchase of commercial paper. Safety should always come first, and the best buyers of paper will always have this first in mind, with rate as a secondary consideration. A very large number of paper buyers ask immediately on the offering of notes for discount if the rate is say 5 %, when the market varies from $4\frac{1}{2}$ % to 5 %, and refuse to consider the paper unless it bears the top rate, taking weaker notes in its place at 5 %. *This is an absolutely wrong method to pursue.* The best is none too good; and in finance, where safety of the principal must necessarily be the chief aim of an investor, this is an especially apt rule to follow. Commercial paper can often enough be traded in as to rate and usually it is worth while in buying paper to try to trade somewhat on rate; but it is essential to good banking and finance that the purchases of paper shall finally be made from the best paper available bearing the market rate, the market rate being determined by the offerings of all paper coming from reliable sources. The market rate will usually vary from one-half to three-quarters of one per cent.

Contingent Liability Should be Classed With Accounts Payable.

Inquiry should always be made from borrowers whether any contingent liability exists, and if it does it should be reckoned as part of the floating

debt of the borrower. A contingent liability must be met, if the need comes, just as an ordinary liability must, and it accordingly should be just as well protected. All assets bearing on its protection, however, whether or not owned by the borrower, may properly be grouped in the consideration of whether or not the contingent liability is properly protected.

It is Well for Lenders on Commercial Paper to have the Following Questions Answered by the Makers of the Paper.

The answers to the following questions will greatly assist possible lenders in making up their minds whether paper may be bought with confidence. Borrowers should be willing to answer all of them if they expect general credit. It is taken for granted that a recent statement is presented with the offering of the paper. The questions should be answered as of the date of the statement.

1. Does your financial condition, as shown in your last statement, fairly represent your customary protection for your debt?

2. In what particulars is the protection of your debt apt to change?

3. What was the maximum total of your notes and accounts payable by years during the last three years? Give dates.

UN

4. What was the maximum total of your

(a) Cash

(b) Notes and accounts receivable

(c) Merchandise

at these same dates?

5. Have you any contingent liabilities?

Give maximum contingent liabilities by dates during the last three years.

Give the nature of these contingent liabilities.

6. Do you use more than one broker and if so how many and whom?

7. Give your losses from bad debts for the last three years.

8. Are any of your accounts and bills receivable overdue? If so, what amounts?

9. Give average length of age of your accounts and bills receivable.

10. Are any of these due from subsidiaries? And do these represent merchandise sales only?

11. How do you arrive at a valuation of your merchandise?

12. State all the insurance you carry.

13. Are any of your liabilities secured or endorsed and have any of them been secured or endorsed for the past three years? If so, describe the security or endorsement given.

14. Do you take advantage of all trade discounts?

15. Do you give notes for any merchandise?

16. State where you keep your bank accounts.



17. Are you planning any new expansion of business, change in policy or new financing?

Large Borrowers Have to Pay a High Rate.

Oftentimes a note offered for discount at $4\frac{3}{4}$ when the market rate is $4\frac{1}{4}$ to 5% will be fully as strong as notes offered at $4\frac{1}{4}$. The price of commercial paper is not necessarily a criterion of worth. Price being a resultant of demand and supply it readily appears that certain notes, the promisors on which are not well known, and yet who are strong and make a good showing, will at times have to carry a somewhat higher rate of interest to invite purchasers than will paper the worth of which is widely known. Moreover, large borrowers, owing to the practice of diversified investment, have to make their borrowings attractive to a very large number of lenders. Hence they are forced to put a rate on their paper which will carry it broadcast, although the borrowers themselves may be of the strongest sort, and although if they wished to borrow say \$50,000 instead of \$1,000,000 they might be able to find a lender who would discount their paper at a considerably lower rate than the lender gets on the basis of the larger offering. Rate is often taken as an exact representation of strength, and a comparison of rates is made to compare relative strength. *This is often exceedingly fallacious and*

should not by any means be set down as an absolute rule to follow.

City Banks Do Not Get as High Rates as Country Banks.

City banks are but intermittent lenders in the open market. They have to care for the large reserves of the country and they have comparatively few funds on which they can depend for steady buying of paper. As the nature of the business of all of them is similar, when they do buy they buy nearly together and in large quantities. Their position to trade for rates is therefore weakened, and as a consequence *city banks rarely obtain as high a rate on the paper they buy as individuals or country banks do.* They cannot expect to. Often the market rate in the city and in the country will vary from $\frac{1}{4}\%$ to $\frac{1}{2}\%$. It should not vary over this, nor should banks outside the centres expect it to. On the other hand, country banks should remember that they are entitled to a rate slightly above the market and should not be bashful in asking for it.

Borrowers Should Not Expect Maximum or Minimum Rates at Their Own Banks.

Borrowers who discount with their own banks must realize that these banks are bound to stand by them at all times, and consequently should not

expect the minimum any more than they should the maximum rate that trading in commercial paper brings in times of ease or of stress. What borrowers at their own banks most need is a dependable and non-fluctuating market for money for their requirements, and such a market entails steady interest rates. If it is not fair for a bank to charge the maximum rate during a panic to its own customers, *neither is it fair for the customer to expect the minimum rate in times of very easy money.*

Low Rates Should not Stop the Buying of Commercial Paper.

When money is easy, it is a great question for many banks and investors whether or not to buy commercial paper or longer time securities bearing a higher rate. Bankers who are not students of fundamental conditions often make the grave error of buying long term bonds at such times. Bankers, however, who study fundamental conditions and the Compositplot of Business Conditions prefer always to keep a large amount of liquid or semi-liquid capital on hand. For them it usually seems best to buy commercial paper, not over four months in length, if money is very easy, rather than to gamble on being able to realize on the longer term securities bearing the higher rate in case a need comes to liquidate them. Call money in times of very easy money is next to

worthless as an earner of interest. Four months' paper as a rule bears nearly as high a rate as six months' paper does. Conditions are apt to turn suddenly. Hence it is that four months' notes are named as the most desirable form of investment in times of great ease.

**When Commercial Paper Rates Are High
There Are Often Greater Bargains
in Other Fields Than That of
Commercial Paper.**

When rates are high, as in times of panic, in spite of attractive rates many investors turn from commercial paper to convertible bonds and high grade investment stocks. Such investments even by investors, who as a rule need to put their money into short time commercial paper, are very often justified. For those who have been buying commercial paper in the hope of securing bargains in the investment field this is apt to be the opportunity for which they have been looking, as it is usually in such times that bargains occur. One of the chief advantages of good commercial paper as an investment to many is that it puts them in a position to accept such chances as these, as it assures them with a supply of ready money every few months, however great the crisis.

Discount Should be Figured by Days.

In the discounting of commercial paper, buyers should discount by days and not by months and days. Up to a few years ago both systems were generally in practice in this country, but now it is the general practice of all dealers in commercial paper to discount by days alone, that is, if the paper has a month or more to run, to figure the actual number of days instead of calling a month thirty days, as is done in figuring bond interest. There is no law compelling the figuring of discount by days other than the unwritten law known by the banks and in force because practiced by the majority of them; but it is the general custom among the big buyers of paper and should be adopted by all for the sake of uniformity, if for no other reason. The system of discounting by days is, of course, obviously to the advantage of the lender over the system of charging interest by months and days, thirty days to the month, as it allows a few extra days' interest in the course of a year.

CHAPTER III

LENDING AND BORROWING.

THE money in any community is enhanced to the holders if it can be made to increase.

In any community with a proper monetary system, money and the substitutes for it, practically correspond to the wealth of the community. If we take *money* as representing the wealth of a district, which is not strictly a true representation, but which is sufficiently so for our purpose, and *capital* as that part of the money used in the attempt to increase any given supply of money, we have the basis of business. These are the first factors to notice in an investigation into what constitutes an effective system for the increasing of any given supply of wealth.

Most men have a desire to progress in whatever they have undertaken. As most of us are dependent for our happiness to a large extent on money, most of us are engaged in turning our money into as effective a form of capital as is possible. Provided gain in money to the holders of the original capital is not at the cost of the good of the whole community, this advance is constantly to be attempted and every method for giving individual holders of money opportunity to turn it into effective capital is to be discovered and fostered.

Money is Unevenly Distributed.

In every community money is unevenly distributed among the individual holders. Some men are born rich, some acquire riches and some have riches thrust upon them. The shrewdness, ability, or opportunity of some over others has always caused a difference in the distribution of money. With this in mind it is easy to see how certain men are better able than others to make money earn more money. It is also easy to perceive that oftentimes it is not the men with opportunity who have the money to turn into capitalistic form.

Interest is Divided Between Borrowers and Lenders.

If it is well to attempt to turn to capital account any given supply of money in a community or nation, any thing or things which can bring this about are needed servants of the community. Lending and borrowing, if according to true economic principles, are such, and their use is to be aided by all possible means. Lending and borrowing serve a double economic purpose. Lending, if the lender has not as satisfactory a chance to increase his money as capital as the borrower has, insures to him an enhanced value of his money. Borrowing, if the borrowing is warranted, insures to the borrower a certain amount of money wealth. Interest is something like eco-

nomie rent. No money will be lent which the lender feels will not show an actual compensation in return for the time and ability spent over looking up the security of a loan, plus the amount the lender could make his capital return if he wielded it himself. On the other hand, no borrower will borrow unless he feels that his borrowing will bring him a return sufficient to compensate for the time and ability he spends in wielding the capital lent him. The return in borrowed capital over and above the sum equivalent to these two compensations we may call middle ground interest. Properly, the borrower and the lender should each receive one-half of any middle ground interest there may be. The actual apportioning of this part of the gain on capital is ruled by the relation or apparent positions of lender and borrower.

Commercial Loans Carry Pure Interest Only.

The price of money, at any one time, like the price of anything else, is ruled by demand and supply. Therefore, if a single borrower is opposed by several lenders, his share in the middle ground interest is properly more than one-half, and vice versa. But fused into this is the knowledge of the lender of the borrower's desire to borrow, or of the borrower of the lender's desire to lend. Fused into this also is what the borrower can make the lender think his need to lend is, or, on the

other hand, what the lender can make the borrower think his need to borrow is. Actually, the apportioning of any middle ground interest is dependent on what appears to be the demand and the supply rather than what really is the demand for and the supply of money. We are speaking now of ordinary business loans in which no more than an ordinary business risk is involved. The interest in such loans may be called pure interest, whether it takes the form of discount in commercial paper or interest in collateral loans, bonds or other form of investment. When there is an evident element of risk in a loan over and above that always apparent in business loans, the apportioning of middle ground interest is directly dependent on the risk involved. Such interest takes the form of a bet or insurance.

Insurance of Commercial Loans Should be Possible.

Insurance companies have served a very useful purpose for the world in accepting individual risks because of the strength of many. Health, the value of real estate and shipping have all been allowed to retain constant values through insurance. As yet such chance for the retention of the face values of commercial loans of money has not been afforded to any marked degree by insurance companies or other financial agents. In such loans there is a great field which must be more

widely opened. Doubtless within a comparatively few years an enormous amount of insurance will be taken in one form or another on loans bearing unusual risk. There is little more reason why loans for ventures of unusual risk should not be insured than that destructible real estate or shipping and the like, which would be largely the product of these loans, should be insured. Up to a certain point, very considerably beyond that now admitted, borrowers should be able to get credit, and this they undoubtedly will be able to receive before long. At the present time the only method of writing such insurance or semi-insurance is through lenders which are largely banks or other forms of fiduciary agents. It is obviously the duty of such lenders to avoid unnecessary risks and to confine themselves as much as is possible to the gaining of interest in pure form. Risks, however, must sometimes be taken. As President Hadley of Yale says: "Risk is an incident to progress." We should hardly be far advanced in our increase of wealth if we had avoided risk altogether. Some method of insuring risks in lending should come to the front; but it should be distinct from the methods of raising money for ordinary business loans. Any student of the increase of money wealth or of any of its factors must studiously avoid confusing the interest dependent on ordinary business transactions and that dependent upon transactions in which there is admittedly more risk.

All Lenders Should Study Business Conditions.

It is, of course, apparent that knowledge of conditions is the great factor in the deciding to which class loans belong. What may be pure interest to one man may be interest in the shape of insurance or a gamble to others. For this reason it is most important that all lenders should be thoroughly conversant with the fundamental condition of the nation as a whole as well as with the conditions of borrowers. With bankers too much stress cannot be laid on their acquaintance with general business conditions, the basic factors in their business world and the general forecast of future business events. This means that bankers must recognize the Law of Equal Reaction,—that every action is followed by an equal reaction.

To gain the right to compete with the ignorant and to enter a small group from a large one, often enables a lender to secure from the law of demand and supply what is pure interest at a considerable advance over the average of pure interest return in that particular market. Where lending is a business in itself nothing but constant study of the many changing business conditions will enable the lender to compete at such advantage with his fellows. It is most advisable that every aid in this direction shall be made use of.

Loans are to be Classified.

In dealing with the particular subject undertaken, we have to consider primarily those lendings and borrowings in which there is no more than an ordinary risk. Commercial paper, as we have seen, is by its very nature opposed to any usage except for ordinary mercantile transactions in which no more than the average risk in such dealings is involved, and in which any interest accruing is interest in pure form. There are various forms of borrowing, both for loans involving exceptional risk, and for those which do not; but as interest in the form of risk insurance is a study by itself, and without our especial field, we must here confine ourselves to the ordinary business loans, or those in which money seeks to turn itself into capital and at the same time to avoid channels in which its gain may not readily be classed as pure interest. Loans dependent on such capital may be divided into the following classes: —

1. The borrowing directly from one thoroughly conversant with the condition of the borrower.

- (a) Loans between individuals, with or without security, in which the lender has an intimate acquaintance with the borrower.

- (b) Loans between groups of individuals, or between a borrower and a bank, where the lenders have such intimate knowledge.

2. The borrowing through one or more distant channels from lenders only moderately conversant with the condition of the borrower.

(a) Long time loans, with or without security.

(b) Short time loans, with or without security.

These classifications may, of course, be themselves many times subdivided; but for a short inquiry into lending and borrowing, and for our especial purpose, they will suffice.

Classes 1 and 2.

In Class 1, that of loans in which there should be protection through knowledge against any exceptional element of risk, we have to place broadly such loans as the careful investor would at once feel fairly certain of as being paid at maturity. No one can be sure of absolute security in the world of lending and borrowing; but there are many loans, some apparently better than others because of known resources back of them, yet all of which seem from the first likely to be convertible into cash at their expiration. These are to be grouped under Class 1. To Class 2 belong such forms of loans as those which, because of lack of knowledge of conditions or for other reasons, need and receive additional "checks" or security to prove their soundness over and above the safeguards which a lender having intimate knowledge of the borrower would demand.

The Place of Commercial Paper.

Commercial paper, which is our subject, is a form of loan, with or without security, suited only for a short time transaction in ordinary mercantile business. Always provided that the laws relating to the issuance of commercial paper are kept, this, or any form of loan at all closely allied to it, finds its place distinctly in Class 1 or 2 of our classification of loans. It will appear that if any commercial paper ever by its history proves itself to have belonged or to belong outside of the employment of capital in which the accruing interest cannot be classed as pure interest, it is because the laws governing its issuance have been disregarded. Loans to packing houses on short time, or to some large dry goods house or to a mill, if properly issued, are examples of commercial paper. These loans are made to firms conducting a well known business and for well known needs. They distinctly belong with loans, the interest on which is pure interest, as there is no exceptional risk involved in the loan. *Stock subscriptions, underwritings and loans for unusual commercial ventures, even if for short time only, cannot be so classified, and belong to a field outside our stated divisions.*

Collateral Loans.

In our first division of loans, that is, of loans in which there appears to be no especial element

of risk, and in which the lender has an intimate acquaintance with the condition of the borrower, we have to deal first with loans which show their value in their form, such as loans secured by salable collateral, and second with unsecured loans such as usually occur between banks and their individual customers. There are other loans which fall into this class but the foregoing are the most prominent. Collateral loans form a very considerable portion of bank investments throughout the world and are among the safest. In this country loans on approved collateral with a ready salable value and a margin, are considered as among the most desirable investments to be had. Even the necessity for allowing borrowers against collateral to make exchanges against this collateral does not change their relative position as compared with unsecured loans. Abroad, commercial bills, if in acceptable form, bring lower rates than collateral loans do; but abroad, commercial paper is on a different basis from what it is with us. Collateral loans to be worthy of the name must be secured by collateral for which a market is known, and the collateral should be put in at prices which can be readily obtained in that market. Securities quoted daily on some large stock exchange, and generally accepted as being quoted at a fairly constant valuation, should be the most acceptable form of collateral.

A Margin Should be Guaranteed on Collateral Loans.

A margin in value of collateral over the face value of the note should be given, the amount of margin varying with the chance for sudden shrinkage in the salable value of the collateral. A guarantee should be given in the note that this margin will be maintained during the life of the loan or the loan will become due and payable. In the case of the best bonds ten per cent is usually taken as a conservative margin to be required to be maintained when active listed bonds are given as collateral against borrowings. In the case of the best active listed stocks twenty per cent is customarily demanded as a conservative margin. On stocks other than the best, or in the case of loans secured by stocks which are all of one kind or very similar, a greater margin than twenty per cent is often required to be maintained; here again the margin being dependent on the history of the prices at which the stock has sold and the chance for its depreciation at the moment. Loans secured by one class of stock or bonds are obviously not as satisfactory as loans secured by mixed collateral and such loans usually require a larger margin of safety.

Collateral Loans Form Our Best Test of the Money Market.

Collateral loans often test the value of money for the moment better than any other form of

- security. Call loans, which banks put out from day to day, and which they depend on first to replenish their reserves if a need comes, are all secured by quick, usually the quickest, collateral. Call money, as it is known, and money lent on three or four months' time against the same sort of collateral, which, by the way, is usually sixty-five per cent railroad stocks and thirty-five per cent industrial stocks, are as near money as any loans can well be. Interest or discount accruing on these loans is absolutely pure interest and represents without any foreign factors exactly what money is worth for the time the loan is made. From call loans secured by stock exchange collateral, sixty-five per cent railroad, thirty-five per cent industrial, and properly margined or secured by similar collateral that has an immediate salable value, it is but a step to loans secured by like collateral for six months, a year, or even longer. The longer loans are of the same order as the shorter ones though they make use of money held for rather different purposes than the money which goes into short time collateral loans. The goodness of the longer time collateral loans is, too, somewhat more difficult to estimate than is that of the short ones, for it is hard to foresee just what level of prices for securities will rule from six to twelve or more months ahead. The margin requirement partially obviates this difficulty, so far as the security for the loan is concerned; but the late maturity prevents the lender from using the

money for the purchase of securities if it seems advisable before the loan matures.

Weaker Collateral Loans Should be Especially Well Margined.

Often certain notes creep in among collateral loans on which the collateral, though apparently in good repute and fairly salable, is dependent on the efficiency of the promisor for its salable value. Borrowings by bond and stock houses carrying large blocks of securities which obviously require very extensive work to sell, which have not a broad market and which are offered chiefly by the bond or stock house in question, are examples of such loans. These loans, though not necessarily faulty, should be protected to a fuller extent than the other collateral loans already referred to. If such notes are taken, the promisor should be known to have especial strength, and a considerably larger margin than on loans secured by more stable collateral should be called for. Twenty to thirty per cent is not too much to ask for on notes secured by bonds carried in this way, and thirty to fifty per cent on stock. Moreover, great care should be taken that the securities given as collateral are put in at what is really a fair valuation. Too often the collateral is valued at the "asking price" instead of at the "bid price."

The Best Collateral is Listed Collateral.

The fact that a security is listed on a stock exchange, even the New York Stock Exchange, is not in itself evidence to warrant its being accepted as the best of collateral, any more than the fact that a security is not listed should preclude it from acceptance as collateral. The best collateral, however, is that listed on some large stock exchange, because it can be more readily quoted there than in the private market; and, to be satisfactory, collateral must not only be listed, *but quoted and quoted regularly through bona fide sales and purchases, at least several a day.* The amount of such sales and purchases over some time should also be taken into consideration in lending against the security in question.

The Relation Between Banks and Their Customers Should be Very Close.

In the case of unsecured loans between banks, individuals or groups of individuals and their customers for money, a more difficult problem presents itself than that which appears in loans secured by collateral. Banks doing a general banking business largely cater to those persons engaged in business who will keep a fairly large deposit all the time with a bank for the sake of being able

to call on the bank for a loan, usually considerably larger than the deposit, at certain times during the year. The amount to be loaned and the length and other terms of the loan is governed by the amount of the deposit and the condition of the bank. Such so-called "borrowing accounts" form the basis of the deposits in most of our national banks and in many of our trust companies and state banks in this country. Loans based on them fall distinctly in the class of borrowing in which there is or should be a most thorough personal knowledge of the condition of the borrower on the part of the lender. Borrowing accounts with banks exist either to effect the major part of the financing of a business, or to effect a final and absolute resource in time of need. It is obvious that in either case the bank should know exactly where it stands in regard to its customer, a knowledge which necessarily includes thorough information in regard to the business done and the business needs of the customer. As safety of its own deposits should be primarily its first care, a bank cannot for a moment afford to offer itself to fill a wide breach, such as a borrowing account often offers, unless it knows that it stands on firm ground. *Any depositor using his deposit as a borrowing account should recognize this fact absolutely. He should regard his loan with the bank as that with his best friend, being willing to show his condition at all times, and also being willing to be guided so far as his financing is concerned largely*

by his bank's advice. The financial experience of the officers of a bank is necessarily so much wider than that of men engaged in mercantile affairs alone that if the bank officers are students of fundamental business conditions their advice should be taken as the best obtainable. Respect, too, should be shown a bank by a customer as in the case of a friend if the demands on the bank appear to be such as to preclude a loan as asked for on account of other demands on the bank's resources. Such occurrences as this where a loan is asked for in all fairness should not occur often. If they do, other borrowing accounts should be opened in other banks; but occasionally such a condition will arise and when it does the bank deserves friendly consideration.

Banks Should Not Pay Interest on Borrowing Accounts.

Two facts are very important in a consideration of borrowing accounts. The first is that a borrowing account should not give a customer of a bank a right to demand a loan larger than four or five times the amount of his average deposit, a loan which should not be for more than ten months of the year; and which at least once each year should be paid in full. The second is that banks having borrowing accounts should not pay interest on those deposits made by borrowers which call on the bank to any considerable extent for loans.

There is too much competition between banks on a basis of a war of interest. Such a struggle is injurious to the best interests of banking and to the usefulness of banks to their customers, as it hampers them greatly. For borrowing accounts banks perform excellent service as it is, and this should be sufficient.

Large Borrowers Need Resources Other Than Their Own Banks.

Bank accounts carrying the right to borrow at the bank, at certain times, or so-called borrowing accounts, include the right to the depositor to call on the bank to protect short overdrafts, or to discount short or longer time notes or commercial paper. The chief use of such accounts is, however, limited to the right of the depositor to the discounting of short time loans or commercial paper. It is this that forms the basis of the lending to customers on the part of mercantile banks, a lending which, as has been shown, should be dependent on an intimate acquaintance between borrower and lender. As will be readily seen, however, no man or group of men engaged in extensive business operations can fairly expect to obtain, or as a matter of fact can by law obtain, all the money they need to borrow for their business from their bank or banks. Such men, too, like to keep their opportunities to borrow from their own banks open so that in case of need they may fall back on them. The consideration of the bor-

rowings that these men make use of, therefore, leads us to the consideration of Division 2 in our classification of loans — those loans made through one or more distant channels and from lenders who can be only moderately conversant personally with the condition of the borrower. Such loans are, from the point of view of the borrower, hardly different from the loans made with friends or with his own banks. To lenders under this class, however, the difference is very great. A general knowledge of the conditions of the borrower is impossible, with the result that either certain special safeguards have to be called for to surround loans of this class, or it must be stipulated that loans shall take a certain form, the safety of which is fairly apparent.

Many Large Borrowers Can Best Finance Themselves Through Well Secured Bonds.

Many businesses need to borrow money for a long period. Such businesses do not care to tie up their ability to borrow from their own banks or friends for good and all, so they make use of the general investing public or the general investing banks. This is done primarily through the medium of bonds, and customarily these bonds are secured by mortgage. There are a great many people with available wealth wishing to turn it into capital without accepting much risk themselves, and who cannot or do not care to place their

funds in local loans. To such the offers to borrow on the part of large businesses, the good standing of which is generally accepted, offers which come for small sums and all of which are secured by a share in fixed assets, the stability of which is vouched for, form attractive inducements to many to turn this available wealth of theirs into capital. To the borrower such forms of loans are advantageous, for a considerable amount of money is obtained for a considerable and definite length of time, and whether the fixed assets are mortgaged or not does not affect the general business done. To the lender, however, there is certain knowledge that there is something to fall back on in case the earning power of the company fails. To those who lend this makes all the difference in the world. Lenders believe, of course, in the general successful operations of the borrower, but really base their loan on fundamental assets. For this reason borrowers who make use of distant sources of capital, which can be only moderately conversant with the actual condition of the borrower, should not fail to appreciate the point of view of such lenders and be ready to secure their bonds in every reasonable way. They will have far better success in their borrowings if they do this.

Long Time Bonds Should be Especially Well Secured.

Lenders of this stamp should demand ample margin of safety in security on long term loans.

Conditions change so rapidly, especially in a new country like this, that the longer a loan is made for the better should the loan be protected. That the country is constantly advancing in inherent wealth and that a business now successful should grow with it, is not a sufficient answer to this statement. Very long term bonds, say for anything over twenty-five years, should be especially well protected, and if possible some method for partially, at least, repaying the total borrowing should be introduced into the terms of the bond issue. Sinking funds are excellent institutions for the lender, and rarely hinder the operations of the borrower. The sale of refunding issues is a perfectly proper means of raising money on the part of a borrower to repay loans, but a possible lender sometimes questions how much refunding a borrower may be able to do fifty or a hundred years from the time the loan is made. The introduction of sinking fund requirements in the terms under which long time bonds are issued, will aid the selling of those bonds enormously. *An even better scheme of finance over sinking fund requirements is to have an issue of bonds mature serially. This over a term of years works better for both borrower and lender.*

Debenture Bonds May Also be Satisfactory.

Some large borrowers in excellent standing may, after covering their fixed assets with mortgages,

still wish more money for long time and issue debenture or non-mortgage bonds. These may or may not be good; but investment in them should not be made till after a very careful study of the earnings, assets and general reputation of the borrower has been made. Debenture bonds such as those of the Boston and Albany Railroad Company, which has no mortgage on its property, are, of course, as long as the bonded debt is considerably less than the fixed assets of the company, just as good in themselves as mortgage bonds; but it should be remembered that mortgages may be placed on such property unless a promise has been given in the debentures that they shall not be so placed. Such bonds, therefore, are not as satisfactory as mortgage bonds, though in the case of debenture borrowings, such as those of the Boston and Albany, lenders may expect that a history of good standing as to credit will be maintained, and that even if a mortgage were executed it would hardly be so placed as to imperil the holders of debenture bonds.

Short Term Notes are Also Often Proper Mediums of Finance.

What is true of long term borrowings through distant sources, is largely true of borrowings for a shorter time. A belief in the convertibility of the loan and its actual convertibility must be present if a loan is to be worthy of the name.

Often a company can issue bonds but does not wish to sell them at the moment, either because of an inappropriate money market or for other sound reasons. A company often in such an instance issues the bonds and instead of selling them places them as security, usually with a margin, against six months', one, two, three, or more year notes. Such borrowings usually are of considerable value to the borrower, who in consequence pays a rate of interest which is always attractive on the money market in which they arise. If the terms are satisfactory, these loans should be very attractive to lenders, as it keeps their capital fairly liquid and ready to take advantage of opportunities for exceptional investment, as they occur. Stock of controlled, or partially controlled companies, is occasionally placed as collateral on such notes instead of or with bonds. The value of such collateral is dependent on the worth of the companies represented by the stock, and although stock is not as a rule as desirable for security as bonds, loans like these, secured by stock in part or whole, as, for example, certain notes of the "Bell" Telephone Companies, may be very good investments.

Short Term Railroad Debenture Notes May Also be Satisfactory.

Many railroads, when the investment market is not to their liking, issue short term debenture notes. Though business conditions change rapidly,

they should hardly change so much that steam railroads in good standing will in a few years fail to protect such debenture notes. Railroads have wide credit, if they have it at all, and are consequently better able to issue and to protect debenture notes with safety to the lenders than are industrial corporations serving a local district, and apt to keep their business as secret as possible. Debenture borrowing of railroads and like corporations on comparatively short time is a satisfactory form of finance provided the borrower is in good standing and has wide credit, not otherwise.

Commercial Paper is a Medium of Finance For the Purchase of Merchandise Only.

General businesses need to borrow money for short periods of time to a considerably larger extent than public service corporations. They find a call for merchandise and a chance to buy it for less than they can sell it. To fill all orders they can get they need more money than they have with which to buy this merchandise. Such borrowing as this, to buy merchandise or something similar, which is to be turned into cash, presumably at a profit, and within a short time, is called borrowing through commercial paper.

Commercial paper is the name given the medium for such borrowing and is not properly applied to any other form of borrowing. It fills a field of its

own and requires separate analysis and study. It is different from the borrowing of railroads and public service corporations, even for an equivalent time. It is different from the borrowing of an individual on the most salable of security and with ample margin. It is a method of finance all its own, just as mortgage bonds are in their particular field. It is a very important factor in the financial system of any country.

As business is the attempt to turn available wealth into capital, and as most business must have to do with the purchase and sale of merchandise, so commercial paper must play a most important part in financing the business needs of a community or nation. Commercial paper is one of the biggest aids that we can make use of in economic progress, that is, in the acquisition of true wealth. Commercial paper is entirely as proper an economic medium for borrowing and lending in its own particular field as are other forms of security in theirs, and when properly used to do the work for which it is intended, and no more, it is exactly as safe. In fact, for the student of fundamental conditions, who at times needs to have his money in liquid form awaiting a forced readjustment or panic, good commercial paper is often the very best investment procurable.

As in the case of long term bonds, commercial paper which is to be widely distributed, brokers' paper, for instance, should on its face appear to be issued with full authority and to be amply pro-

tected. Such paper will be more readily distributed, will command lower rates and will be of better service for both lender and borrower if it appears in so favorable a light that the burden of proof will be on him who would make it appear unsound.

CHAPTER IV

THE ANALYSIS OF A FINANCIAL STATEMENT AND REPORT.

A FINANCIAL report consists of two parts, a statement of the assets and the liabilities, and a report for at least the period of a year of the earnings and the expenses. The value of a property being largely dependent on its earning capacity, no financial report is complete without a representation of both of these items. Mills, stores and supplies of merchandise can, of course, be sold either for like use by others or for purposes other than those for which they have been used. For the purpose of representing financial condition in respect to these items, a statement of assets and liabilities alone will suffice and is all that is often given. Such a statement is not sufficient, however, if the true condition of any company as it exists is to be found.

A Financial Statement Should Appear in its Simplest Form.

The statement of assets and liabilities should be a trial balance of the books of the company after all accounts have been reduced to their simplest form. A trial balance showing many items which

should, for instance, be charged to profit and loss is not in clear form. The investigator should analyze all general items on a statement, and should be aware at least of their general make up; but this work of analysis should be a study separated from that of a review of the general financial condition of the company. It should be a subdivision of this work. The first regard of a student of the finances of a company should be for totals on the asset and on the liability side of a statement which are properly to be contrasted. For this reason he should not be forced to examine minor items on the asset side, for instance, which he will ultimately have to charge to the liability side, or vice versa. He should demand that the statement he is to examine be presented in its simplest form with an explanation of its items set down elsewhere. If it cannot be so presented, it should be his first duty to place all items under their proper general headings.

The Usefulness of a Statement is in its Representation of Contrast.

In any statement of assets and liabilities, the assets should be entirely by themselves and the liabilities entirely by themselves. The usefulness of a statement is in its representation in contrast. If, for instance, the assets are arranged as follows, as often happens, a poor form of statement results.

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ASSETS		LIABILITIES	
Fixed assets.....	\$50,000	Capital account...	\$40,000
Mortgage.....	20,000		
	\$30,000		
Other assets.....	10,000		
	\$40,000		

The mortgage should appear among the liabilities, so that at a glance an observer can see that the total money put in the business is \$60,000, which is represented by \$60,000 of property. The other form of statement, as exhibited, shows the situation; but it does not set it forth clearly and it does not show the margin of safety. It does not show at a glance that there are \$60,000 for which the assets are liable. In the case of a statement at all confused by many items, it may take a careful review to diagnose properly the situation. A careless observer might pass over the mortgage, the most important item, altogether. The first thing, therefore, for the analyzer of a financial statement to do is to make clear to himself exactly what are the liabilities and their nature, and the assets and their nature.

The Form of Statements Must Necessarily Differ.

Statements of assets and liabilities vary in their form according to adaptability of the form for showing the financial condition of any particular company. A mercantile company should show its

assets and liabilities carefully grouped to represent fixed assets and quick or current assets. Opposite them it should show, first, capital and surplus accounts and mortgage account, then all other liabilities which are to be contrasted with the current or quick assets. Current or quick assets are those which are necessarily to care for the liabilities already maturing or about to mature. A mortgage having some time to run, or funded debt of any form which may be classed in a statement with a mortgage, look to the fixed assets or the credit they allow for their liquidation. A mortgage or funded debt should show its maturity on the statement, so that the observer may judge from the nature of the fixed assets whether they are likely to retain their value to the maturity of the funded indebtedness. A proper form for the assets and liabilities of a company engaged in a mercantile business is as follows:

ASSETS		LIABILITIES	
Real Estate....	\$25,000	Capital.....	\$100,000
Buildings.....	40,000	Surplus....	40,000
Machinery.....	30,000	Mortgage (1930).. <td>30,000</td>	30,000
		Notes payable....	25,000
Accounts Rec...	\$60,000	Accts. payable...	5,000
Stock on Hand.	35,000		
Cash.....	10,000		\$200,000
	105,000		
	\$200,000		

From a statement such as this the observer can tell that there is a mortgage of \$30,000, not matur-

ing for some years, covered by \$95,000, and having, evidently, a fair margin of safety behind it if the fixed assets represent real worth. He can also tell readily that the debt for which the company is immediately responsible amounts to \$30,000 which is covered by \$105,000 due the company very soon or in hand.

Liabilities Should be Examined First.

In the analysis of the statement of a mercantile company the assets and the liabilities should be arranged, at least in the reader's mind, in some such order as appears in the foregoing. The liabilities are the most important and should be looked at first. Primarily should come the amount of capital that has presumably been put in the company by those interested. The best form for this item to appear in is, if the case in hand is a partnership, as follows:

Capital \$100,000
(Representing cash)

or if the case in hand is that of a corporation, as follows:

Capital stock	
Pfd. stock.....	\$50,000
all paid in	
Common stock....	50,000
all paid in	
	————— \$100,000

It Should be Known How Much Cash the Capital Item Represents.

It is a very important matter to find out how much real money the capital item represents. Many corporations include in their capital account a considerable amount of "water" stock and mark up their real estate and machinery on their asset side, or fill in with patents, good will, etc., to equalize. If money has really passed for these patents and good will, they are probably of value and have some right to appear in the assets. If no money has passed for them, their value, which is problematical at best, has usually no right to representation on the statement. The safest form of statement and the one most likely to inspire the reviewer with confidence is one that does not include patents and good will at all, or that marks them off as soon as possible, and that states the amount of money that has actually been put in the business. This should not necessarily preclude the introduction of "water" stock, for it is possible to offset stock that clearly is water by an item such as "common stock possibilities." Stock watering is not necessarily an evil. Men who risk much may deserve exceptional profits and for the benefits of business it often occurs that these problematical profits should be represented by certain securities other than those representing real dollars and cents. Often too, it is desirable to spread dividends over a large area rather than to pay high

dividends on a small amount of capital stock. The capitalization of a surplus or a large earning capacity on a small dividend basis is very often a worthy end. The situation, however, should be made clear and not disguised as it is in many statements of financial condition today. The real situation is the one to be discovered; and if it is not clear in the statement, a true explanation of the situation should be demanded at once.

The Money Equivalent of the Stock Item Should be Known.

Sometimes stock, even preferred stock, has been recently sold below or above par and represents less or more than its book value. If the company has a surplus, any premium for the stock should appear; and if the company has not a surplus, any deficit in the sale of stock from its par value should appear in a profit and loss item on the asset side. The analyzer of a financial statement should assure himself that the real money equivalent of the capital stock item is represented on the statement under consideration.

The Surplus Item Should Receive Very Careful Consideration.

With the capital item should be considered the surplus item where any such exists. The surplus should represent real money gain on the part of the company which has been left in the company.

Surplus account is the margin of safety of the capital account. A large surplus account shows a history of conservative policy on the part of the managers of a company and also success over an extended period. It represents also a resource for times of need. A surplus should be looked for on any financial statement, the larger the better. Where no surplus item exists, inquiry into the causes for its non-appearance should be begun at once.

The Surplus Item is to be Analyzed.

The surplus item may represent several things. It may represent simply net gain which is in the form of undivided profits, and profits which might fairly be capitalized. It may represent a reserve account for future risks, in which case it cannot fairly be capitalized. It may represent a depreciation account for real estate, buildings, machinery, or a sinking fund for the retirement of debt. Any analyzer of a financial statement should satisfy himself as to which class the surplus item belongs. Properly, the surplus should show on its face the kind of surplus it is. A depreciation reserve is very different from a surplus ready for capitalization and properly it should be entered not as surplus but as a depreciation charge.

The Book Value of Fixed Assets Must be Carefully Studied.

Land, buildings and machinery may depreciate fast. If they are not marked down at proper

intervals, a depreciation account should offset their loss in value or need for repairs. The analyzer of a statement must assure himself at once that all fixed assets are carried at not exceeding their present value. If they are carried at cost, when they have gone off in value or are likely to in the near future, a proper liability charge should be made to insure the company up to the amount of the loss in value. Fixed assets should never be carried above cost. To do so confuses the situation immediately and nullifies the usefulness of any financial statement.

Properly a capital and surplus account should read as follows: —

Real property \$50,000 Capital \$50,000
(Cost price)

Where the cost price is equal to the present valuation

or

Real property \$40,000 Capital \$50,000

Where the present valuation is less than the cost price

Profit and

Loss 10,000

\$50,000

The Profit and Loss item on the asset side may be deducted from surplus account to an equal amount when sufficient surplus exists on the liability side.

In case the property has increased in value, the following form is recommended.

Land.....	\$50,000	Capital.....	\$75,000
(Cost price)		Surplus.....	5,000
Increase in value..	10,000	Depreciation ac-	
Building, built 1912,		count.....	5,000
cost.....	25,000	Mortgage due 1930.	15,000
Machinery, new,			
cost.....	15,000		
			\$100,000
	\$100,000		

The Purpose of any Depreciation Fund Should Appear.

Depreciation may exist to pay off the mortgage or to offset decreasing value in the building and machinery. If new property is bought, or the old repaired with the depreciation fund, it is to be presumed that when the mortgage comes due it can be renewed on the same terms as those on which it was originally placed. To maintain value of property is usually better than to have the mortgage paid by the depreciation fund and to have the usefulness of the machinery and buildings exhausted. The reviewer of a statement must make up his mind what is a fair depreciation and reserve account under the conditions exhibited and look for such accounts either by themselves, which is where they should be, or in the surplus item.

Statements for Several Years Back Should be Compared.

Comparison of statements, if possible over a term of years, and always for at least a year, should be made in any investigation of the finances of a company. This should be made with especial reference to surplus account. If a loss is shown, inquiry should be made regarding it. A comparison of financial reports should show as well as the difference in surplus accounts any difference there may be in volume of business being done and in profit. Besides the surplus item, comparison should be made from the statements, especially of notes payable, notes receivable, and merchandise items. If a marked disparity occurs, inquiry should be made regarding the causes.

Any Long Time Debt Item Ought to Show the Maturity of the Debt.

Turning back after consideration of the surplus item to the simple statement already shown, the analyzer finds that mortgage or long time debt account, if any exists, is next to be considered. This, as has been stated, should show its maturity, and should be at once compared with the permanent assets of the company, due consideration being given to the reserve account offsetting any likely depreciation in connection with them.

Any Funded Debt Should Have a Large Margin of Safety.

If the long time debt in the form of mortgage or other funded debt matures within a comparatively short time, the analyzer of the statement, before he can pass on it as satisfactory, should assure himself that new financing for the refunding of this debt is already accomplished, that it is likely to be, or else that the assets of the company are sufficient at a forced sale to liquidate the mortgage debt and leave a sufficient balance for his purposes. If the long time debt does not mature for a considerable period, he may be satisfied if the permanent assets afford a fair margin of safety for the mortgage debt, and if what he feels is a fair depreciation account is being maintained.

Capitalistic Accounts are to be Kept Distinct From Other Items.

By some writers bonded debt is regarded as capital. It is hardly to be so regarded if an exact representation of financial conditions is required. Bonded Debt or long time debt is distinctly, however, to be grouped with Capital and Surplus accounts. These three items are to be considered as "capitalistic" accounts, or as accounts pertaining to capital, and they must necessarily be considered together and as a whole, apart from other

liabilities of the company under examination. They are each of them, however, distinct. Grouped with them at times may be such items as Insurance account, when the company carries its own fire or health insurance, Depreciation, Reserve, etc.

Funded Debt Should be Protected by Fixed Assets.

Long time debt accounts are contrasted with quick assets only as a rule when the company in question has had great success and has built up a large working capital. It must be remembered that the liabilities of a company form the most important factor in connection with it. The larger margin of safety over any debt, the better. Hence quick assets are looked to as being usually only enough to protect current liabilities. *The permanent assets should in themselves usually protect capitalistic accounts.* Having made up his mind regarding the situation of the capitalistic accounts, and having compared them roughly with the permanent assets, the examiner should review carefully all permanent asset items. He should satisfy himself that the value of the land as shown by the statement is close at least to its statement valuation. He should assure himself that the buildings have been appraised by a competent judge, and that the opinion of that judge is expressed on the statement. He should consider the machinery, if any, with a view to its adaptability for its

immediate purpose, its condition, and its being up-to-date for the work to which it is being put, at the same time applying any depreciation and reserve accounts there may be, as has been shown.

Earnings Should be Examined Carefully.

Having contrasted carefully the permanent or fixed assets of a company and its capitalistic accounts, the examiner should glance at the recent earnings of the company. If the earnings appear to be good and the comparison he has just made satisfactory, he may go on to further consideration of the statement at once. Small earnings, especially where interest must be paid in any quantity, should be taken as a danger signal at once; and if the examiner is at all hurried he should inquire immediately into the condition of the earning capacity of the company. If earnings are satisfactory, however, or where they are not, if he wishes to complete his study of the statement, he should now go on with the items making up current liabilities.

The most common current liabilities consist of

Bills payable

Notes payable

Accounts payable

Reserve for bad debts

Deposit accounts

Accrued taxes

Wage items
Interest accrued
Notes on demand
Rent
and similar items.

The Bills Payable Item Should be Kept Down.

Bills payable should be small. Every company should keep its small charges well paid up. In this item should come such charges as running expenses other than salaries and rent. Most of the factors making up this aggregate will be small, and it is an expression of a well run business if they are taken care of as they come in and are not allowed to accumulate, especially at the time for putting out a statement. It shows carelessness, lack of resource and lax methods where a large accumulation of bills payable exists.

Great Emphasis Should be Laid on the Study of the Notes Payable Item.

Notes payable should include commercial paper only. Of course, the smaller this item is, the better for the company. If the amount is large the examiner should make sure that the notes are not renewals of old debts, as if they are they are apt to show an unhealthy condition, as has been stated in the Chapter on the Selection of Commercial Paper. When possible, notes payable

should be divided so as to show the amounts of notes payable to the banks of the company and those notes placed in the general market. Notes which are payable to the banks of a company are not as much a danger in themselves as those placed in the open market, since they are more likely to be renewed without trouble in case the need arises. Their existence limits borrowing ability, however, and the best condition for a company, where a floating debt is essential, is to have the company owe its banks nothing, as in this case it can go to them for assistance, if occasion arises requiring special aid. The floating debt of a company is its greatest source of danger, and an investigator of the affairs of a company can hardly pay too much attention to it. The study of the notes payable item should be taken in conjunction with a consideration of general business conditions and of the business needs of the company under investigation. The student should make up his mind from his knowledge of conditions what a fair amount of notes payable should be and he should compare this amount with the volume shown on the statement. If the amount seems overlarge as given he should at once satisfy himself as to the causes.

Accounts Payable Should Represent Merchandise Recently Bought.

Notes payable may be given directly for merchandise. Inquiry should be made whether they are

or are not so given. Any borrower in the open market should show accounts payable for merchandise rather than notes payable, and any item of notes payable for merchandise should be inquired into very carefully.

If the item of accounts payable is large, the volume is apt to indicate that merchandise discounts are not taken advantage of. The question should be asked when the merchandise was bought. A large volume of accounts payable, where such arise for merchandise bought some time previously, expresses at once an unhealthy condition, and is apt to show lax business methods. With a large amount of accounts payable arising directly for merchandise, inquiry should be made as to why the merchandise has not been paid for. The large amount may be proper, but it is apt not to be so. Inquiry should be made in a study of the notes and accounts payable item if any of the notes and accounts payable are secured, that is, if any form of collateral is given with them. If collateral is given for all, the giving of it may be an entirely proper matter. This is for the investigator to decide. But where, as very often happens, collateral is given for some and not for others, a great source of danger may exist for any unsecured creditors. It is a matter not to be passed over lightly.

Notes and Accounts Payable Form the Principal Items in Current Liabilities.

The notes and accounts payable items in a statement will usually form the chief factors in the total floating debt or current liabilities. When these are considered, a review of the quick assets of the company which are supposed to care for them should be made as well. We have taken two and a quarter of quick assets to one of debt as a proper proportion to look for. The analyzer must be sure, however, that the two and a quarter, or whatever the sum of the quick assets shows over the floating debt, is a fair representation of value. *The merchandise should never be figured above cost and should be put in the statement at the market value if the value is below cost.*

The Accounts Receivable Item Should be Relatively Small.

The accounts and bills receivable item should as a rule be small. If it is large it is apt to show that the company has been forced to carry its customers. When this item is large, inquiry should be made at once regarding the cause, and if a satisfactory explanation is not given a scaling down of this amount should be made. The good standing of all customers of a company which owe it money should, of course, be investigated when

making a complete examination of the financial affairs of any company. Perhaps a sinking fund or a reserve for bad debts may be necessary. The analyzer of a mercantile statement should make inquiry as to the bad debts of the company for previous years. He should average them and if needed he should find a reserve for bad debts on the liability side of the statement or should make an allowance from the accounts receivable to an equivalent amount.

Quick Assets Should Protect Floating Debt.

Quick assets, or those to be grouped for contrast with floating debt, should include those only which can command an immediate liquidation without much sacrifice. Machinery cannot be figured as a quick asset, real estate cannot be, patents, good will and stock in subsidiary corporations are not to be so considered. Timber property may or may not be. It is dangerous to include it as a quick asset, yet timber property has a fairly ready salable value and may under certain carefully restricted conditions be so placed. *The common items to be classed as quick assets are merchandise, cash and bills and accounts receivable.*

Deposit Accounts May be Dangerous.

Liabilities other than those already considered that may appear among current liabilities are

usually minor in character. They are *deposit accounts, accrued taxes, wages, accrued interest, notes on demand, rent, etc.* Deposit accounts, unless withdrawals are prevented by a stated agreement, if they are at all large, are apt to be a source of danger to creditors other than the depositors. Depositors are apt to be those who have associations with the company. It is these who in time of trouble would be the first to know of it and to protect themselves by withdrawing their deposits. In considering the relation of quick assets to floating debt it is well where a deposit account is shown of any size to deduct the amount of the deposits from the total quick assets, and then to compare the remaining quick assets with the current liabilities other than the deposits. Notes on demand should be classed as deposits unless the makers guarantee the debts of the company.

All Minor Liabilities Should Appear on a Statement.

Accrued wages and interest and rent as well as unpaid insurance that is about to be due should appear on a statement in some form. These items will not as a rule total very much, but a well run business will have them always in mind and will show its preparation for them on its statement. Insurance is usually paid for by five year periods in advance. It is well for a company to show a sinking fund for renewal of insurance where it does not carry its own insurance.

Contingent Liabilities Should Also Appear.

Contingent liabilities such as endorsements, etc., are a source of grave danger to many companies. There should properly be no contingent liabilities. Where they exist their total amount should be stated. Their situation should be investigated and proper allowance made for them among the liabilities of the company.

It is Important to Know if a Company is a Partnership or a Corporation.

In consideration of any company, inquiry should be made at first as to whether it is a partnership or a corporation. Partnerships carry personal liability on the part of the partners in favor of the creditors of the company. Most corporations have no such liability. A few states have arranged that there shall be a certain liability of stockholders for debts of a corporation chartered under their laws, but the value of this liability to creditors is problematical and is apt to be of no very great value. It is well, however, for an investigator to know under the laws of what state any corporation which he is considering is incorporated and the gist of the corporation laws of the state.

A proper form of statement for a mercantile company in a full exhibit is as follows:

ASSETS

Land.....	\$50,000	
(Cost value)		
Buildings.....	30,000	
(Built 1900)		
Machinery.....	20,000	
(New)		
		\$100,000
Cash.....	15,000	
Accounts and bills rec.....	40,000	
Merchandise.....	50,000	
(Cost value)		
		105,000
Stock in other corporations.....	5,000	5,000
(Bid price)		
		\$210,000

LIABILITIES

Capital pfd. stock.....	\$50,000	
(all paid in)		
Common stock.....	25,000	
(all paid in)		
Surplus.....	50,000	
		\$125,000
Mortgage.....		40,000
(due 1930)		
Bills payable.....	3,000	
Notes payable.....	20,000	
Accounts payable.....	15,000	
Reserve for bad debts.....	2,000	
Insurance s. f.....	1,000	
Other liabilities.....	4,000	45,000
		\$210,000

The company has no contingent liabilities. The buildings have been marked down in value 2 % for each year since they were built.

All accounts and bills receivable are considered good.

The present market value of the merchandise carried is greater than its book value.

Full insurance on all assets is carried.

A B C Company

by X Y Z, *Treasurer.*

All statements should be signed by a proper official of the company, and if possible should be audited. *Also, comparative Balance Sheets for previous years should be submitted to show how the company has progressed.*

Income and Expenditure Accounts Ought to be Analyzed.

With a study of the financial statement of a mercantile company, there should be a parallel study of the earnings of the company for at least the past year. Often a statement of condition will show the net gain for six months or a year as a separate item. It is well to have such an item appear. Where it does not appear, and for a thorough study where it does appear, the income and expenditure sheets should be carefully examined. These should show gross sales, cost of materials, cost of manufacture, cost of sales, dividends, and charges to surplus or sinking fund accounts as well as any other receipts or payments. If a company owns stock in another company its receipts on this stock will, of course, also appear.

A Company Should be Making at Least Eight Per Cent Net.

If an industrial company is not showing eight per cent net earned on its stock, where all the stock represents a paid-in capital, special inquiry should be made as to the reasons. Small earnings, or even a loss over one or two years, may mean little; but such earnings over a term of years hardly show a strong financial condition, and should seriously affect the judgment of the investigator concerning the company even where the assets and liabilities compare fairly favorably. A company exists to earn money. If it cannot earn money there is apt to be something radically wrong with it, and a doubly careful study of its financial statement as a true representation of its real condition should be made.

We Have Examples of Properly Constituted Statements.

The annual financial report of one of the largest American industrial corporations gives its income and expenditure account first. It states clearly the total earnings of all properties after all regular fixed charges for these properties have been made. It deducts at once from this amount charges for sinking funds, depreciation and extraordinary replacement funds, giving the result as its net earnings for the year. It deducts from these net earnings interest on its bonds, charges arising from

adjustment of accounts and dividends, showing the item resulting as its surplus net income for the year. The statement then deducts from this surplus net income special appropriations, carrying forward the remainder as a balance for undivided surplus. The statement then exhibits its undivided surplus in full form, and explains its total construction.

Net Earnings are Properly Earnings Applicable to Dividends.

This statement makes a clear distinction between net earnings and surplus net earnings or those after interest charges and dividends. In this case no unfavorable criticism can be made; but as a rule it is the belief of the writers that net earnings should be a term applied to the remainder only of all earnings after every charge has been made against them that can be called a fixed charge, with the exception of dividends. According to this rule bond interest charges should be deducted before any remainder which can be called net earnings can result.

A Proper Statement Will Contrast Earnings and Expenditures Over a Term of Years.

After exhibiting its statement of earnings and expenditures clearly and fully, this corporation has set these forth again in a comparative table

of its earnings and expenditures for the past two fiscal years, showing the increase or decrease in each item. After this, it explains fully the items of charges for maintenance, renewals and extraordinary replacements as well as other items for which charges from gross earnings have been made. It also gives in detail the make up of the items which constitute its gross earnings. The volume of business is also stated, as are its earnings by months and quarters for the past five years.

In Such a Statement all Items Will be Followed by Explanatory Notes.

The statement of condition, as shown in the general balance sheet of the corporation, gives in clear form under distinct headings and with subdivisions under each heading the usual items of assets and liabilities that have been described, with some few additions to suit the especial needs of the said corporation. All items are explained in full in a separate review of these items. Especial stress is laid in explaining the make up of the item of inventory of merchandise. The entire statement of the general balance sheet and of earnings and expenditures is signed by auditors as being in their opinion a fair representation of condition.

A True Statement Will State All the Facts.

Such a report may be taken as an excellent example of what a full and clear report of any

company should be. What it points out are the essential factors all reviewers of statements should look for. Many mercantile companies do not care to make public in such detail all of the factors in their business condition; but if the reviewer really wishes to analyze the financial situation of the company he must bring them to light. The detail into which a review should go depends on the need to arrive at the exact situation. The deeper an examiner goes towards an accurate knowledge of the make up of all parts of the financial exhibit, the better. He must in any case assure himself that he has the chief items among the assets and the liabilities clearly and separately in his mind and that the make up of these items is at least approximately correct.

A Railroad Report is Necessarily Different from the Report of an Industrial Corporation.

The analysis of a railroad report presents many situations which do not appear in the financial report of a mercantile company or of public service corporations other than railroads. Much more emphasis must be placed on the earning capacity of a railroad in considering its financial condition than on the earning capacity of other companies, important as it is in the latter cases. A mill or a store or land used by a mercantile company can if necessary be turned to other uses than those

to which they are momentarily put. The chief fixed assets of a railroad other than its rolling stock are of comparatively little value to anyone but the managers of a railroad operating as the railroad in question is operating. Even rolling stock, though it may be sold to other railroads, cannot be regarded in the light of merchandise like cloth, wool or leather. For these reasons the earning power of a railroad assumes the most important place in its financial exhibit. By earning power, the student must include earning power over a considerable term of years, not for a short time, as earnings from such a period are apt to be dependent on local conditions which do not fairly represent the ability of the road to show increase.

The Most Important Factor in a Railroad Report is its Statement of Earnings.

On the earning power of a railroad depends primarily its credit and opportunity for placing bonds and stock as well as its salable value if a sale is in question. Maintenance of property must be kept up, but the reason is because on such maintenance depends its ultimate earning power, not so that the property as property may be liquidated. A railroad excellently constructed, and built at the lowest possible cost through a territory which will not provide enough traffic to make its operation pay, will have little or no value if a sale of the

property is ever effected. Consequently, it is the earning power of a railroad that must first claim the attention of an analyzer of its condition.

After an analysis of earnings has been made, the student must satisfy himself that the property represents its book value, and that it is in good condition for the work it has to do. He must, as in the case of a mercantile company, compare its debt with its assets and assure himself that a proper margin of safety exists, the margin of safety in this case being dependent largely on the earning capacity of the road. If the road shows good earnings, its credit will be sufficient to refund its debt and to pay full interest charges without danger of foreclosure. If earnings are not good, there is danger of foreclosure, which is apt to mean a small return to stockholders and other creditors owing to the unsalability of railroad properties unsupported by earning power. A railroad with small earning power can hardly, therefore, be classed as in a satisfactory financial condition unless its debt is also very small.

The Total Mileage of a Railroad Should Appear Clearly.

In the analysis of a railroad report it is best to have the total mileage of the road clearly in mind, although this total mileage should be so divided as to show the amount of main track. Earnings for a road with a large main trackage

which are equal only to those of a road with a much smaller trackage, of course, appear in an unfavorable light. For this reason, having found the main trackage of the road, the gross earnings, operating expenses, and net earnings, all per mile, should be ascertained. The revenue should be divided into earnings per ton carried per mile, or ton-mile, and per passenger carried per mile, or passenger-mile. The maintenance charges per mile, the improvements per mile and the debt per mile should also be set down. The cost and maintenance charges for locomotives, freight cars and passenger cars should also be kept clearly in mind. If possible, opposite these figures and in parallel columns, similar statistics for several previous years should be placed, and an average taken. At any rate, opposite them, and in parallel columns, similar statistics should appear for one or more other standard railroads conducting as nearly the same sort of business as is possible.

With the Mileage of Railroads in Mind
a Comparison of the Roads
Can be Made.

With this work done and not before, is the student in a position to appreciate intelligently the earning power of the road he is considering. He has reduced its earning power to simple units, and he has compared them with like units. In no other way can he comprehend the situation scientifi-

cally. To say that a railroad is earning net, after all charges other than interest and dividends, the sum of \$3,500,000 and that it has a bonded debt of \$40,000,000 is no criterion for comparison for investment with a railroad earning \$1,000,000 after similar charges, and having a bonded debt of \$10,000,000 on a like interest basis.

If, however, we have given us the amount of miles of main track of the first road as 2,000, and of the second road as 500, we have a ready basis for comparison. The earnings per mile in the first case will be \$1,750 contrasted with a debt of \$20,000 per mile. The earnings of the second road will be \$2,000 contrasted with a debt of \$20,000 per mile. Charges for maintenance and depreciation being the same and the physical property being in equally good condition, the sources of income being also of like nature, it appears that the bonds of the second road are more attractive for investment. To complete the comparison, the amount of outstanding stock and the selling price of that stock will have to be figured.

No Item Should be Passed Over Carelessly.

The more units in miles that are found, and the more years that this analytical work covers, among the items in expenditures and receipts, assets and liabilities, the better for a study through comparison of the condition of the road. Among them must necessarily be proper allowances for sinking

funds, rentals, interest and depreciation. A railroad, having to keep absolutely to date in the matter of efficiency, needs much larger depreciation and maintenance charges than does the usual business. Such a comparison proves only the value of the road per mile. It does not show the total value of the property in question. This must be ascertained through multiplying the net mile units by number of miles, and by valuing the terminals, rolling stock, etc.

The student of a railroad report must make sure that the money value of physical property as it appears on the statement is a fair valuation, or that it does represent such when accompanied by liability items which are available for replacement charges. The investigator should also have an eye to the item of securities owned and outstanding guarantees. Railroads deal in such large figures that an unprotected liability would probably turn out to be of great extent if it was worth consideration at all. No item should be passed over that is not thoroughly understood, and the greatest care should be taken that every liability or possible liability of the railroad is comprehended.

A Proper Report Shows the Analysis of all Items.

The ideal railroad report gives first the income account for the past two years in comparative tables showing revenue from freight, passenger and

other transportation, and then reduces this revenue to revenue per mile. The report then gives operating expenses in the subdivisions of maintenance of way and structures, maintenance of equipment, traffic expenses, transportation expenses and general expenses, showing the total and reducing them to expenses per mile. Other items going to make up the summary of receipts and expenses are also shown. Each item in the entire report so far given is analyzed in explanatory notes, the ton-mile and the passenger-mile units being clearly shown. The equipment is described in full with the charges for depreciation on this equipment. Explanation in full is also given of the items on the general balance sheet, and such contingent liabilities as exist. All of the more important items are contrasted with similar items on the general balance sheet of the previous year.

A Financial Report Will Not Prove Conditions.

Financial reports, if they are correct and properly framed, will usually be sufficient for even an exacting student. Crude bookkeeping, however, or lack of bookkeeping where bookkeeping should evidently exist, will arouse suspicion on the part of an investigator at once. The art of proper finance and the expression of that finance in financial reports will always make for the benefit of the company in question.

The sick man who does not take proper care of himself and who covers up his disease may pass muster with his fellows for a time, but he is sure to suffer by it in the end. The moment he marches into line for examination by a competent physician, he is discovered at once and is often roughly treated for his attempt at deceit. Health and finance are very similar, and this suggestion is given for the benefit of both borrower and lender.

But one should not depend upon a financial statement alone. Health, happiness and, most important of all, character, are not shown on printed sheets. Yet these intangible factors are most important. How can they be ascertained? In our opinion these factors can be learned only by a study of the beliefs and motives of the management. If the direction of the corporation is in the hands of men who believe that the end justifies the means, then the paper of such a concern is questionable. If however the men are those who faithfully serve and trust the Law of Equal Reaction for their reward, then the paper of such concerns can be judged by their reports.

CHAPTER V

BANKING

BANKS have been among the chief factors in the industrial and social progress of the world during recent centuries, and on their strength has depended largely the ultimate success of those making use of them. Every community of men has had a certain amount of prosperity, and in an early stage of this prosperity every community has found a need for some storage place for the expression of this prosperity to draw on as desire or necessity arose. It became evident early that those who were best able to avoid famine soon gained distinct advantage over rival peoples.

In the case of the early races, therefore, the storage place that was needed was one for food, for these peoples soon found that it was to their great advantage to save their surplus food supply for times when such could not readily be obtained. Later, money, or its equivalent, which could draw food or munitions of war or whatever was desired from other nations, was stored. The storage place either for surplus food supply or for money or the like was a bank, a word derived from the Italian word "banca," meaning a bench, and coming probably from the old German word "banch,"

used as referring to a store of goods and meaning first a mound, second a bench or seat.

Wealth is a Complex Term.

All that any nation or people has to maintain it in its own particular standard of prosperity or well being we may call its wealth. The word wealth is derived from the Anglo-Saxon word "weal," and back of that "wella," meaning well being. Wealth is properly that part of the economic resources of any given district that make for the well being of that district. Often what has been a real advantage to a race or people later becomes the undoing of that people. When this last state arises what is injurious is wealth no longer. Yet it is not till the injury is long done, till a perspective has been obtained, that this condition can be recognized.

It is only natural that the resources of a community, which are what men desire for sustaining life and for a reserve to fall back on in hard times, should be regarded as a whole as wealth. The drowning man who clings to his gold is hindered by it, yet he regards it as his most valued possession. We have come therefore to consider wealth those things which the majority of men wish to possess. So long as the wish to live and to sustain the life of those we care for is the foremost strain in mankind, the wealth of a people can never be far from those factors in its environment which

go to maintain its existence. In its full sense, however, wealth must include character and righteousness as well as money and property.

Wealth is the Foundation of Progress.

Most races which have lasted for any time, by the passing down of an increasing knowledge and by thrift have gradually increased their store of wealth. With this increasing supply to fall back on in time of need, or to swing in the direction of new opportunity, their success and wealth have rapidly compounded. It was the men who first had this surplus, that built the first great kingdoms of the world. In themselves, except for their strength or education, they were no better as a rule than those they conquered or who died leaving their lands and their stores to the living. The greater strength or intelligence or opportunity of the victors was owing to their greater wealth, a wealth which at first consisted of food supply, later of munitions of war or their equivalent. Later still, wealth assumed a more complicated complexion, for as wars decreased, the field for the hands of men enlarged, and with it their desires. Wealth then consisted of a varied assortment of factors in men's lives, all of which seemed desirable, and all of which made it easier for them to live, increased their comfort or gave them pleasure.

Wealth and Available Wealth are Not the Same.

The part of the wealth of any community which that body can put aside for emergency or turn towards new opportunity is its surplus or available wealth. What one man might think he could put aside another might not, however, so we have to say that the amount of wealth which is available wealth is governed by the total wealth of the group under consideration, and by the manner of living of that group. The available wealth of a man or of a nation is that part of the total wealth which is over and above the part needed to sustain life and to maintain it at any set standard.

In Protecting Wealth Banks Assume a Most Important Duty.

It has been the banks from the first that have been the principal custodians of available wealth. As it has been the use of this available wealth at the proper time that has been one of the chief instruments in the progress of mankind, so it has been the efficiency of banks in preserving this wealth entrusted to them that has permitted the progress when attempted. Banks today, as they always have been, are the most important of public servants. In their protection of available wealth they perform the greatest of benefits to their community. If they ever fail in their protection they

injure their community probably to a greater degree than can any other instrument.

The First Bankers Were the Romans.

The first bankers in the present-day sense were Romans. The varied coins which poured into Rome from the conquered provinces brought a need for money changers. This profession of men quickly came to the front. They at first merely changed money but later took money on deposit, having deposits of two kinds, one on which they paid interest, one on which they did not.

Money has Represented Wealth for a Long Period.

The coincidence of money and wealth was effected at an early date. As ownership of wealth was almost always individual, and as men desired different things, some common ground for the exchange of property was necessary. This was found through the medium of money, a word referring properly to metal coins only, but broadening quickly to include whatever was used to effect exchanges of property or to reckon values. Aristotle says, "We call wealth all things whose value can be measured in money." Mr. Mill, a thinker with somewhat greater experience in practical economics, voices the situation the other way by saying, "Everything forms a part of wealth which

has a power of purchasing." Land, being a basic condition for life and something readily computed as to value and desired by all, may occasionally be used as money. This use can occur in an agrarian community only and its occurrence is less and less, for where a monetary system is at all in keeping with the call for it a finer monetary system based on metals has been adopted for every need of reckoning values, or of exchange, and is by far the simplest medium for these purposes.

In the Middle Ages Interest Was Unearned.

An investigation into the function of banking should include a study of the loans made by the Jews in early years, for the Jews were great wielders of wealth. They were particularly thrifty and kept much by themselves, holding together in spite of distance between the integral parts of their race. The Jews managed to accumulate much of the money wealth of Europe and swayed their wealth with effect, showing that then as now money in bulk is one of the most tremendous powers men can wield for good or evil. Their monetary history is interesting because of its contrast with lending and borrowing of today.

With the exception of the maritime cities and a few other cases, loans made in the middle ages and through the period of feudalism were used either for the purpose of war or for display and

were, economically speaking, unproductive and without right to interest; though as a matter of fact interest rates were probably never higher than during this period. The money lenders of old did not part with their wealth to another, even for a time, without the expectation of gain to themselves. They charged interest, and at a very high rate. The borrowers were chiefly men of prominence whose power rested on their strength at arms or their display. These were their holds over the people, and to maintain them left time for little else.

Interest Was Then Regarded as Usury.

For this reason, and because the borrower, if he were able to pay back a loan at all, was apt to be strong enough not to pay, at least without a struggle, any consideration for the lending of wealth other than the return of that wealth, came to be regarded as needless and beyond the law. It was a skilful money lender who could exact anything like the full tribute he demanded, and bitter always was the struggle between the lender and the borrower in those days. Interest was regarded as usury, or illegal interest, and was finally prohibited though probably not very successfully. As Mr. Pierre Des Essars says in his "A History of Banking in the Latin Nations," in ancient days profits from the lending of money

were considered illegitimate on the theory that "money is in its very nature sterile and unproductive."

Banking Necessitates Individual Property Rights.

Early banking brought out one situation, as all banking must. It presupposed a recognition of individual property rights. Banking and property rights must necessarily go hand in hand. Banking is absolutely dependent on a state of civilization in which the law of the ownership of property is fixed and maintained. And the history of the world has shown that the most successful banking is the banking which facilitates the retention of individual property rights and does not retard them.

Capital Must be Fairly Constant in Amount.

We have seen that a certain portion of the wealth of any community is to be classified as available wealth because it is over and above that part needed to sustain life and to maintain it in the community at any set standard. *The part of this available wealth which is used to create more wealth for the holders of it is to be known as capital.* Capital thus becomes the active part of the wealth of a nation. It is for the use of this capital that one is justified in paying interest. Today it is

the money in general circulation. If, as during certain panics, money which in this, as in any of the civilized countries, represents the wealth of that country, is withdrawn from circulation and is stored, the country is forced to do its ordinary business or work on a greatly decreased capital. If the supply is greatly decreased, the machine is incapable of any creation and the whole work stops. The conservation of energy is as true in the banking as in the mechanical world. We cannot make something out of nothing. When, as in this country, banking is of such tremendous importance and so dependent on a monetary system which will keep pace with the business needs, it readily appears that we cannot progress as we should unless the monetary supply is adequate.

Capital is Essential for Economic Advancement.

Capital is indeed the force which permits progress, and any impulse or system which denies it should be frowned on or checkmated. Every aid to regulating the available supply should be fostered as much as possible. The miser is properly looked down on by his neighbors. No less dangerous, however, are those who force the pace of unproductive luxuries too fast. They exhaust or tie up the available wealth of those who could use this wealth to better advantage for themselves and for the world in general.

When Trade Developed, Interest Became an Acknowledged Right.

Attempts have always been made on the part of owners of wealth to turn their wealth into capital. With the passing of feudalism and a general state of war into a more industrial era, opportunities to increase wealth occurred generally. The result was that the entire attitude of the world toward banking and interest changed. The growth of the guilds increased trade, and with it the chance to make borrowed money earn something. The man who borrowed money and spent it in *unproductive* pursuits was at a relative disadvantage. As opportunities for increasing wealth grew through other means than war, the old attitude toward interest and money lenders died. If the lender provided means for increasing wealth, the right was his to at least a portion of the return.

Trade being far more consistent in its return than war, this portion could be more readily computed in advance. The result was that interest soon found itself on a firmer footing than it had ever been before, with the exception perhaps of the great maritime cities of Italy. As the modern view of interest developed, there came a feeling on the part of the lenders that they should not claim too great a share in well earned profits. They recognized that they should encourage trade as much as possible, for by so doing, over a term of years their profit would be the greater. Interest

became an acknowledged right, but then as now too high an interest charge became acknowledged as harmful, both for the borrower and for the lender. Interest is simply a reaction. This reaction is beneficial or harmful to the lender in accordance with its effect on the borrower.

Banks Rule Interest Rates Today.

Interest is a development of civilization for the compensating of the lender in an economically useful enterprise. Banks, as we have seen, are the chief custodians of those forces which aid economic progress and out of which capital can be made. As most capital is borrowed capital, it follows that it is the capital lent by the banks which is the chief factor in interest rates today.

Banks Have Three Great Duties.

Banks have three functions to perform. They are depositories of the available wealth of their community, since protection can better be given to this wealth in one place than in many. They have first, therefore, to collect as large a sum as they can from all. This entails their being able to collect many small amounts. Their second function is to lend this money in productive enterprise by turning it into capital. Their third duty is to regulate the extension of these enterprises through their knowledge of fundamental conditions, based upon a recognition of the Law of Equal Reaction.

Banks Should be Allowed to Charge for Their Services.

Banks charge interest for making available wealth into capital: (a), to compensate themselves for their trouble; (b), to pay interest on the available wealth entrusted to them and so attract this available wealth. The men who have charge of turning wealth into capital have one of the most important functions in the state to perform. To make sure that the money they lend is not to go to economically useless enterprises, but that it is certain to return increased and within a limited time, needs great knowledge, shrewdness and care. The men who plan for this lending deserve compensation, and it should be large enough to keep the best men in charge of such work. As the compensation of the employees of a bank together with the interest given depositors amounts to a large sum, the earnings of a bank must be made large enough to provide a fair return.

Money Credit Entails Convertibility into Money.

Banks make their profits by lending: (a), money; or (b), credit. The first bankers lent money only. As business grew more complicated, it was found possible to use certain substitutes for actual money in business. These would pass as money, were dependent on money and yet were not really money. These substitutes became known as

credit. Credit from its derivation means belief. Roughly, credit has grown to mean that substitute for money which carries with it the belief that it can be readily converted into money if desired. It readily appears that credit must necessarily be the great factor in commercial enterprise, increasing directly in importance with the number of times it is used. To have money where one can readily get at it, and also make it earn interest, and, at the same time, find something which, based on the money, may also be put out at interest, is a much to be desired result. This something, if it can be found, is credit.

It should be borne in mind, however, that the usefulness of credit is dependent on its ready convertibility into money when desired. Hence anything which checks the belief in its convertibility, tends to hinder its usefulness, if not utterly to destroy it. Credit, accordingly, in business necessarily has a larger meaning than mere belief. *Credit, if genuine, must carry with it not only the belief in its convertibility into money, but also the actual fact of its convertibility, if not immediate, at least within a reasonable and known time.* In fact, this is the reason for referring to this subject of banking and credits in this book on commercial paper.

Credit is the Most Important Factor in Our Finance.

Mr. Henry D. Macleod, in his "The Theory of Credit" begins his book with the following quota-

tion from Demosthenes: "If you were ignorant of this, that credit is the greatest capital of all towards the acquisition of wealth, you would be utterly ignorant." He follows it by a quotation from Daniel Webster: "Credit has done more, a thousand times, to enrich nations than all the mines of the world." Certainly credit is the basis of our present-day financial system. As President Arthur T. Hadley of Yale, in his "Economics" says: "The money which an individual uses in his business, though a necessary part of his capital, often seems like an unproductive one. If he can employ credit instead of cash as a means of making his payments, he has a correspondingly larger amount to spend in machinery and other permanent investments whose direct productive power is more obvious than that of money."

President Hadley goes on to point out that credit is used chiefly in two cases: (a), in very poor communities which cannot afford to keep money if it can be avoided; (b), in any community of active producers such as a new country without sufficient money capital. He adds that the use of credit is not necessarily a sign of civilization, though highly organized communities do certain things on credit which less advanced communities cannot do. "But when such operations have once become established," he says, "the tendency is toward an increasing use of cash in their consummation; a practice which saves time, saves waste and saves middlemen's profits." In other words, if credit

tends to get far away from its quick convertibility into the money on which it is based, the more advanced communities see to it that it is brought back as quickly as possible into its proper sphere. Credit is certainly the greatest factor in our financial world. As can be seen, however, even a slight misuse of this delicate and all-powerful instrument will play tremendous havoc with those concerned.

Credit Appears in Many Forms.

There are many examples of credit. The man who keeps his money in the bank and draws checks against it retains the use of his money, which is perhaps at interest, and yet gets the equivalent of his money through checks. If, as has happened, the checks pass from hand to hand by endorsement and are not presented for some time, an efficient instrument of credit has been in operation. Again, the firm which buys a plant and machinery with its capital, and then on the strength of its assets borrows money and buys merchandise to run through its plant, makes use of credit. The notes of a government, as our own issued during the civil war, which are simply promissory and are not based on any definite money or bullion, are credit in another form. Notes such as those of the Bank of France, which are based on commercial paper, are still another example.

Different Methods of Different Banks Are to be Studied.

Banks are the chief wielders of credit as well as of actual money. There are many different kinds of banks today in operation. In any community at all complex specialization must occur. Banking has necessarily assumed such a specialized aspect and now provides, as well as each civilized country has been able to work the matter out, the best facilities for safeguarding wealth and yet furnishing money or credit for legitimate industrial enterprise, which can turn the money itself or the credit which is based on the money into capitalistic form. Each country and community has its own problems and its own atmosphere. What is possible in one country is not always so in another. There are many similar banking problems in all places. A short examination into the different efforts that have been made to solve these problems, with the results arrived at, is interesting and instructive. The different functions banks have been, and are, expected to perform are also worthy of some notice.

The First Bank of the United States.

Our banking system in the United States is the outgrowth of the state and governmental banking systems of early years. There have been two United States banks. The first, organized by

Alexander Hamilton, was incorporated in the belief that it would aid trade and also be able to assist financially the United States Government in time of need. The bill authorizing the bank became a law February 25, 1791. The bill provided for a bank of the United States to be located in Philadelphia, with a capital of \$10,000,000, each share to be \$400.¹ One-fourth of all subscriptions was to be paid in specie, the rest in United States stock paying 6%. No subscription other than that of the government was to exceed 1,000 shares. The bank was to be allowed to issue notes, which were to be legal tender in payment of all debts to the United States. The maximum amount of debt the bank might show, except for deposits, was never to exceed \$10,000,000 unless the contracting of such debts was authorized by Congress; otherwise the directors were to be personally liable. The bank was to be under private management. Branch banking was permitted and was practiced.

The First Bank of the United States Was Not a Success.

The first bank of the United States lent considerable money to the government, in fact accom-

¹ For information regarding the Banks of the United States, cf. "The First and Second Banks of the United States." National Monetary Commission Document No. 571, by John Thom. Holdsworth, Ph.D. and Davis R. Dewey, Ph.D.

modated it as desired, but in many ways it did not work well. Its notes circulated fairly freely, but it refused to accept the notes of its own branches. Though in 1792 it aided Philadelphia merchants when money was much needed, charges of partiality in the lending of its money and credit were very current. Political influence was also charged. When the charter of the bank expired a new one was requested and a great deal of testimony to disprove the charges against the bank was put forth. There was much opposition, however, and the rechartering of the bank failed. The First Bank of the United States closed its doors March 3, 1811.

The Second Bank of the United States.

Within three years after the dissolution of the first bank of the United States there came a new demand for a similar institution, chiefly because it was felt that some strong hand should settle the currency problem. Currency, owing to many state banks with the right of issue, was, as we shall see, in an utterly disorganized condition. A bill providing for a new United States bank was accordingly passed. This bank was to have \$35,000,000 capital, the par value of the shares to be \$100. One-fifth of the total capital was to be subscribed for by the government. Payments were to be made one-fourth in specie, the rest in specie or in the funded debt of the government. Every three years the bank was to make an exact

statement of unpaid debts and of surplus profits. It had the right to issue notes.

The Second Bank of the United States Was but Fairly Successful.

This bank was chartered April 10, 1816, and soon after began business. The first president was forced to resign owing to mismanagement. Although later the management seems to have been better, it did not attain the hoped for end of establishing a sound currency. Jealousy against the bank arose, and the constitutionality of the bank was much questioned. Hence, when, a short time before its charter expired in 1836, the bill for rechartering the bank came to President Jackson, he vetoed it.

Both Banks Encountered Unusual Difficulties.

Both the banks of the United States had difficult work to perform, especially the second one. The scope of the banks was not clearly defined; much, the note issue, for example, was left to the management of the banks to decide on. The managers had had no more experience in banking or knowledge of the theory of it than had the men who drew up the bills for the bank. Alexander Hamilton had been a financier. Many however of those who succeeded him were not. When in difficult times they tried to build up a satisfactory banking

system, they failed. A prominent financier has said that the banks of the United States held this country back thirty years.

The Currency Was the Chief Problem.

The most difficult problem the banks of the United States had to deal with, especially the second bank, was that of the currency. During the period of their operation, and more markedly after 1800, the different states kept giving charters for banks to groups of men who seem to have had absolutely no knowledge regarding the granting of credit or the functions of banking. The banking of these men was certainly of the crudest sort, for they did not seem as a whole to know how to learn by their own mistakes or by those of others. Professor Davis R. Dewey in the National Monetary Commission Document entitled "State Banking before the Civil War" has given a graphic description of banking in these times. It is well worth the reading by those who wish to investigate what banking in the rough form means.

Our Early Banking Was Unsound.

Of all the functions of banking, the proper granting of credit through note issues is perhaps the most intricate and delicate. Our earliest banks were founded on specie. The Bank of North America, 1781, was based on specie obtained by the government from France, and the Bank of

Massachusetts had collected in specie \$253,500 out of its total capital of \$300,000 before it began operation.¹ We did not have a sufficient supply of precious metals, however, for an extended system of banks such as these. Hamilton recognized that we could not found a great national bank on specie and so in 1790 recommended the use of government securities as partial payment for stock. This was fairly satisfactory, for the government was believed to be sound.

In the cases of the smaller state chartered banks, however, it was permitted to pay down a small amount in specie for stock. One could borrow on that stock at the bank, and then use the proceeds of the loan to complete the payments for the stock. Moreover, the charters permitted the banks to issue practically unlimited notes based on no reserve. Thus it can be readily realized that a currency situation arose which was about as unsatisfactory as it could be. From 1812 to 1820 very few banks seem to have had much paid-in capital. Professor Dewey says that Secretary Crawford in 1820 estimated that out of \$125,000,000 capital engaged in banking in the United States only about \$94,000,000 could be called paid-in. Secretary Crawford estimated that only about \$75,000,000 was active capital.

¹ For this and subsequent information, reference is made to "State Banking Before the Civil War." National Monetary Commission Document No. 581, by Davis R. Dewey, Ph.D.

Our Early Banks Could do Almost Anything.

The business a bank could do under a state charter was generally very loosely defined. The holding of real estate except for place of business was usually prohibited, but there were exceptions to this rule. In regard to note issues the restrictions were especially lax. Many of the acts of incorporation did not restrict the giving of credit through bank notes in any way except through limiting the total amount of indebtedness of the bank, amounts which were usually very generous. "In Rhode Island, the charter of the Providence Bank, 1791, placed no limitation of any sort upon circulation."¹

Our State Bank Note Issues Were Fundamentally Unsound.

It is interesting to note that country banks seem to have kept out a considerably greater amount of notes proportionately to their capital than did city banks. These notes were lent to customers and passed according to the repute of the bank in its community and the knowledge men in other parts of the country had of the bank. As this was necessarily small, a very poor credit system was built, founded on little real worth, carelessly extended and almost unredeemable for currency.

¹ "State Banking Before the Civil War," by Davis R. Dewey, Ph.D.

"The Merchants National Bank of Salem, Massachusetts," by Mr. Albert W. Dennis, shows how even in Massachusetts, which was one of the first states to work out a moderately successful system for bank bills, notes had various values. This history also shows how it was feared that politics would constantly influence the granting of bank credit.

Redemption of Notes Was the Problem.

In the early charters no provisions were made for the redemption of notes. "A Boston broker," Professor Dewey says, "was brought before the grand jury of Vermont for demanding payment in specie for the bills of one of its banks, on the complaint of the attorney-general that he was guilty of an indictable offence." In 1819, however, the Suffolk Bank of Boston built up a rough system of protecting the bills of certain banks. From this time on, in spite of many attempts to evade redemption on the part of banks, better systems arose.

Early Banking Showed Many Abuses.

A very considerable part of the loans which were made during the earlier period of banking were accommodation loans. These were made under the prevailing opinion that banks should serve all by an advance of credit irrespective of conditions. In Pennsylvania "the Bank of Penn-

sylvania restricted its loans to sixty days, and the Philadelphia Bank, 1804, to four months.”¹ Later, these banks, owing to the scarcity of short time investments, bought four and six months paper. Banks also lent considerably on real estate in spite of length of time demanded for the loan by the borrower. “In South Carolina the Bank of the State, in 1812, forbade renewals unless a year’s interest was paid in advance. One-tenth of the loan was to be called in each year.”¹ Clibborn, an Englishman, after five years’ residence in Cincinnati, wrote in 1837,¹ as a result of his observation, that banks would not discount unless the directors were directly or indirectly interested. A more serious abuse was the practice of directors of endorsing for a consideration of one, two or more per cent.

The Safety Fund Banking Act Did Not Cover Sufficient Ground.

Different states had different laws regarding their banks; but none seem to have been very successful in their regulation. In New York, in 1829, the safety fund banking law was passed. This law required each bank to which a charter was granted to contribute a percentage of its capital for a common fund for payment of all the debts of an insolvent bank exclusive of its capital.

¹ “State Banking before the Civil War,” by Davis R. Dewey, Ph.D.

Even this scheme did not help matters greatly, as was shown in the panic of 1837. Later, too, this bank fund proved inadequate to meet the demands from all the insolvent banks for both notes and deposits, even after an additional assessment had been made. The theory of the safety fund banking act seems to have been good, but it was not deep enough to effect real benefit. The result was that the system broke down.¹

Much of the Later State Banking Was Unsound.

The banking as outlined here continued in various phases for many years in this country. Most of the banks from 1830 till the Civil War grew more successful as the promoters gained in banking experience. During the period of state banks, however, Mr. Andrew McF. Davis quotes in "The Origin of the National Banking System," "It has been satisfactorily ascertained by careful examination that the people suffered to the amount of more than \$100,000,000 by broken bank notes." Most of the trouble from the wild-cat banking, as it was called, was in the West. Mr. Davis quotes one writer, who says that in Illinois over 47 banks in 1860 were merely banks of circulation, without

¹ For a report on the Safety Fund Banking Act cf. "The Safety Fund Banking System in New York, 1829-1866." National Monetary Commission Document No. 581, by Robert E. Chadwick, Ph.D.

capital and doing no business at their nominal locations. It is easy to see that the credit granted by such institutions might cause trouble. It had been proved, as Demosthenes said, that credit was the most important instrument in the business world and that any disturbance of it worked incalculable injury.

The National Bank Act Solved Many Difficulties.

When the Civil War came, although banking was on a considerably sounder basis than it had been, there were still many unsatisfactory factors, owing chiefly to a poorly secured note issue by individual banks. At the same time there arose a great need for government financing. Mr. Salmon P. Chase, the Secretary of the Treasury, solved these two problems together. He planned an act which became a law providing that banks to have right of note issue should incorporate under a national charter. They were to secure their notes, under strict limitations, with government bonds only. This scheme at once placed an artificial value on government bonds, which was greatly to the government's advantage. It also ensured safe and uniform note issues on the part of the banks in the country. The act incidentally solved other problems. It provided, for example, for rational reserves against deposits, and gave the name of "national banks" to banks incorporating under

the act. This was a signal to all that banks bearing this name were conservative in their operations by necessity. No attempt was made to change greatly the older system. There was to be no central bank. The system of separate units still remained, only their operations were restricted and they were put under government supervision. At the same time the plan of operation under the national bank act was made so attractive as to force the old state banks to exchange their old charters for new ones under the act.

The National Bank Act Has Permitted Prosperity.

Mr. Chase aimed at the business banks of the community, the banks which concerned themselves chiefly with the mercantile demands of the country. These were the banks which naturally were required to give and protect credit. Incidentally, he arranged for a very small expansion and retraction of the currency. How well the plan has worked, time has shown. Comparatively speaking, we have by this act secured safe banking and certainly better banking than we had before. Credit, both the giving of it and the protecting of it, has been better understood and insured than it was before. Whether our banking system has yet attained even a near approach to adaptability for its environment, is an open question. Certainly we have prospered under the national bank system of this

country, and if this system has in places not suited the country, the country has at least partially changed itself to suit it. The wheels of the system have kept constantly turning.

Savings Banks are Primarily for the Benefit of the People.

The national banks have cared for the mercantile demands of the country. Deposits with them have led to business loans. They have necessarily kept in touch with the general business conditions. There are in any extensive community, however, a large number of people who do not need bank accommodation, and who wish only to save money, and to make it earn something and be at the same time safe. To provide banks for these and to foster such saving as being for the general welfare of the community, the several states have permitted the organization of so-called savings banks. Their province is primarily to safeguard the earnings in small amounts of the citizens of the states, without at the same time having any especial demand on them to aid the mercantile needs of the community. These banks have also been formed to lend on real estate as being especially suitable an investment for this money. Each state has formed its own laws for such banks. Practically all of these laws differ from each other in some respects, but all aim at conservatism of investments consistent with the gaining of a fair

rate of return for the depositors. The best of these banks are without capital, it being felt that as they are organized for the people only, and have had thrown around them especial safeguards as to their deposits, anything which they may earn shall go to the depositors, either as interest or for strengthening their security. Most savings banks in New England, New York and certain other eastern states are of this nature. Savings banks ought to be and are benevolent or semi-benevolent institutions.

Co-operative Banks are Similar Institutions.

Co-operative banks, such as are now so successfully in operation in Massachusetts, are but a variation of the same idea. Their field is that especially of the men of small means who wish to build houses. They cater particularly to such men and are serving them exceedingly well by safeguarding their money, paying interest on it and at the same time affording their depositors the opportunity to build houses under proper financial guidance.

Trust Companies and State Banks are to be Classed with National Banks.

We have also in this country trust companies which have become variations of national banks,

though organized at first under state charters to care for trust property, to act as fiduciary agents, administrators, etc. The reason is that it often seems better to appoint a corporation as agent in the care of money rather than individuals, when that care must extend over a period of years. These banks, having gained liberal opportunity to enter the general banking business, are gradually filling not only the field for which they were originally designed, but are encroaching on the business of mercantile national banks. Having usually to keep a smaller reserve than national banks must against deposits, if they see fit to compete generally with these national banks they must become a still greater factor than they are now in the banking machinery of the country. State banks, which are banks intended to fill much the same field as national banks, but operating under state charters, are to be classed broadly with national banks. State banks may often lend on real estate as well as in mercantile transactions.

The Strength of Private Banking Houses is Dependent on Their Free Capital and Their Ability.

There are in the United States, as elsewhere, many private banking houses. Abroad these take more the form of banks, and this they are doing here to a considerably larger extent than they did a few years ago. Some in this country have large

resources, but most have not. They are all much alike, being in existence chiefly to make a profit from turning over securities from one man or firm or corporation to others. The strength of each is dependent on the amount of free capital each keeps in reserve, the sort of securities purchased and the ability of the firm to dispose of these securities once they are acquired. In dealing with such houses these factors in their strength should be considered.

The Bank of England.

Opposed to our banks are banks like the Bank of England. The Bank of England is a bank of a different type from anything we have yet seen in this country. It is a governmental central institution planned to control the reserves of the nation and also to control circulation. The bank consists of two parts, the banking department and the issue department, both being absolutely distinct and separate. Both parts are managed by civilians, that is, by non-governmental employees; but the government is at all times actively interested in the bank, using it as its chief fiscal agent and giving it its moral and even stronger support when necessary. With the exception of a very few institutions which have retained the right to issue bank notes to a small extent, the Bank of England has a monopoly of note issue in England. No notes other than those of the Bank of England are legal tender.

The Bank of England Issues Notes Almost Wholly Against Gold.

The Bank of England issues notes, first against government debt, the proportion of this class of notes, which is limited to the now outstanding notes, being about one-fifth. Second, the bank issues notes against certain other securities, this class of notes being also limited in amount and representing largely the right of banks other than the Bank of England to issue notes. The proportion of this class of notes to the total outstanding notes is about one-eighth. The third and last class of notes is issuable against an equivalent value of bullion, chiefly gold. No silver has been used as a basis of note issue for many years.

England Has an Inelastic Currency.

The currency system of England is absolutely inelastic. The fiduciary circulation, against government debt, etc., is comparatively insignificant. The increase and decrease in the amount of circulation is parallel absolutely with the amount of bullion deposited against note issue. Twice in times of crisis the act regulating the note issue has been suspended. This has allowed notes to be put out beyond the authorized fiduciary issue which were unsecured by bullion; but it is the belief of English students of finance that a crisis would no longer necessitate such a procedure,

owing to the increased use of checks. These, they say, would now replace any lack of currency. The chief factors in the English system, as readily appears, are therefore: (a), a monetary system based almost wholly on gold and inelastic excepting with an increase or decrease in the gold supply held by the Bank of England; (b), a great central reserve held by the Bank of England, a reserve of all the great banking institutions of the country and a reserve in shape for immediate use as needed; (c), a central agent for use in finance by the government.

The Bank of England is a World Power.

The banking department of the Bank of England is the great depository of the other English banks including the London clearing house banks. It pays no interest on any deposits and discounts for customers only, but this it is always ready to do even in times of stress. As a banker's bank, it keeps a very large reserve itself constantly on hand, this reserve ranging often to 50 %. In behalf of the system of which it stands at the head, and on behalf of the financial stability of the world, the Bank of England, not because of any law, but from a so-called implied duty, regulates the supply of gold in the country. This it does by raising or lowering its rate of discount as it thinks advisable and by borrowing as much money

as it thinks advisable in the open market through advanced bids for that money. .

From the prestige given the Bank of England by its constant strength and successful history, from its efficient aid in times of need and from the government money it cares for, the bank maintains itself as the chief factor in the English world of finance. From its size it is able to regulate the amount of credit and through this the gold supply that shall be granted to the English people and — in a way — to the world. In other words, it has made itself a national and almost a world discount market.

English Banking Has Been Consolidated.

There are other English banks, London and country, the large London banks having branches scattered throughout the country and competing with the so-called country banks. There has been a strong tendency towards consolidation in English banking, however, with the result that most of the banking is now done by comparatively few banks. Some of them, as we have said, have the right to issue notes to a limited amount, but none to issue notes which shall be legal tender except the Bank of England.

The Bank of France.

The Bank of France, like the Bank of England, is a private establishment with a paid-in capital,

but in this case the government, in the selection of the officers of the bank, has a more active interest than the English government has in the Bank of England. Branch banking is allowed and is practiced very extensively, far more so than in England. As stated by one of its officers, the purpose of the Bank of France is to do all the banking business possible that is consistent with a bank of issue. Like the Bank of England it is especially a banker's bank and stands ready to discount for or to assist any other bank which may need aid. Its business differs considerably from the Bank of England, however, in the number of small clients it has brought in by its branch banking system. No overdrafts are allowed.

The French View of Banking Differs Much From Our Own.

The French in their banking, as in their law and literature, take a different point of view of matters than do the Anglo-Saxon nations, no less logical but unlike them in kind. This is expressed most clearly in the answers to certain questions put to M. Pallain, Governor of the Bank of France, by the United States Monetary Commission. Asked in regard to the cash reserves kept by other banks with the Bank of France, he answered, "In France we consider the strength of a bank consists more in the composition of its portfolio, *i.e.*, in the value of its commercial bills, rather than in the importance of its cash reserve.

Q. In America is the question of the proper relation between cash in hand and liabilities considered very important?

A. It appears to us that for French private banks the proportion of cash to liabilities is less significant on account of the facilities offered by the organization of the Bank of France for the rapid conversion — in a crisis — of a good portfolio into ready money. The part which the Bank of France plays toward the private establishments permits the latter, as has many a time been proved, to reduce to a minimum their cash reserves and to devote, without exceptional risk, a larger part perhaps than elsewhere to productive commercial operations.

Q. That may be true, but we wanted to find out, if possible, the percentage of the cash held by the banks of Paris in their vaults to their deposit liabilities.

A. I think you pay more attention to the quantity than to the quality.

Q. Do the banks rely implicitly on the Bank of France to grant them credit when they require it?

A. They know very well that in time of difficulty we are the supreme resource.

Q. Does the amount and the character of credit granted to the other banks depend on the amount and the character of their accounts at the Bank of France?

A. There is no fixed rule. It is more especially

the quality of the paper presented which fixes the extent of the credit.

Q. Is the Bank of France regarded as a bank for banks or as a bank for the people?

A. The bank of all the French public.

French Note Currency is Based Chiefly on Commercial Paper.

Answers like these and along other lines in this most interesting inquiry, developed that the Bank of France has a monopoly of note issue in France; that this note issue is based largely on commercial paper, and that the note issue is taxed by the government to a small degree only and according to a certain scale of outstanding notes, limited as to a large maximum, a maximum which may be changed if the need arises. Asked if there was any feeling that banks other than the Bank of France should have the right to issue notes, M. Pallain said:

"The unity of issue was achieved in France in 1848 and at no time since then has there been any question in responsible circles, of a possible return to plurality of issue. The same tendency is leading little by little to an absolute monopoly in England, Germany, and even in Italy. I think it would be interesting for you to examine the recent example of Switzerland, which had its note issue founded, as in America, on the plurality of banks and which has now substituted for this sys-

tem one single privileged bank. This transformation has received popular approval by referendum."

Q. We have in America a numerous class of people who think that the discount banks could better serve the interests of their customers if they had an additional right of note issue, based on commercial assets. What is your opinion?

A. My opinion is very clearly favorable to the principle of unity of issue. In normal times the available funds arising from note issue should only be employed with moderation so as to retain their efficacy in periods of crisis, and it appears to me that this moderation would be less well assured by the competition of a large number of establishments than by the control of a sole responsible bank, which would become the supreme refuge of all the others in times of peril.

The Note Issue is Dependent Absolutely on the Proper Commercial Demand.

The inquiry shows clearly that the Bank of France governs its note issue entirely by the commercial demands on it. If a demand comes for discount of such bills as it considers eligible for its portfolio, the notes or currency are forthcoming. It would make no difference, M. Palain said, whether the notes for discount were presented by banks or by customers in general. Even the exportation of gold would not necessarily decrease the volume of outstanding notes.

Q. There is nothing in the law requiring your notes to be covered by a certain proportion of gold?

A. No regulation of this kind exists in our legislation.

Q. There is no provision that you should hold either cash or bills of a certain character against the note issue?

A. As regards cash we have no particular obligation. The bills must simply have the maturity and the signatures stipulated in the statutes. But the more latitude that is allowed us, the more we feel ourselves bound to insure by the character of our management and by the constitution of very strong reserves, the complete security of the bank note.

Q. Is there anything in the law requiring your notes to be covered either by cash or bills?

A. The Bank of France can issue notes as against cash or against statutory discounts or loans. Every note has, therefore, its counterpart either in the metallic reserve, or in the portfolio of discounts or in loans. As these latter operations are subjected to special conditions of security, one can say that the French legislator — as I have already pointed out to you — gave more thought to the quality than to the quantity of securities offered to note holders.

Q. What classes of bills are discounted by the Bank of France?

A. The Bank of France discounts for every-

one who has obtained the opening of a current account, bills of exchange, checks, bills to order and commercial and agricultural warrants of a fixed maturity which have not more than three months to run and which bear the signatures of three persons, tradesmen, agricultural syndicates or others, known to be solvent. The bank and the branches accept without distinction bills which are payable in any of the 467 towns where we undertake to collect bills.

Q. Do you require three names on all the bills you discount?

A. The statutory rule is that bills must have three signatures, but the bank is also authorized to accept paper bearing only two signatures when the third signature is replaced by a deposit of securities belonging to one of the classes of securities admitted for loans or by a warrant for merchandise (warehouse receipt). When I speak of bills bearing two signatures I mean French signatures, and I mean to say that bills with three signatures must have, among these three signatures, at least two signatures given by parties domiciled in France.

The French Credit System Has Worked Successfully.

M. Pallain showed clearly that with the Bank of France exists a credit system beautiful in its pure simplicity as to theory and perfect in its working.

If a man has capital in France and transfers it into fixed form such as machinery, he can still make use of it as money capital by giving his note, under very carefully stipulated provisions, to the Bank of France for discount. If the Bank of France does not happen to have a sufficient amount of currency and its note issue is below the large fixed maximum point, it prints more and gives them to the customer wishing discount in exchange for his note. At first this would seem a dangerous practice, but so good is the paper that the Bank of France accepts in this way; so many safeguards are thrown around it, so educated have the French people become to the necessity of safety in credit and so careful are the managers of the bank always to have a large gold reserve, the system never goes astray.

France Has a Larger Power Over Gold Than Has the United States.

The French note issue is said to be always amply protected, constant credit for all deserving ones is assured, a national discount market is always at hand and many of the rough edges accompanying the getting and the giving of credit in this country are done away with. With any study of this French banking system, however, two important factors in its commercial environment must be borne in mind; (a), that France is a very old country with great individual wealth and much

capital; (b), that, as M. Pallain points out, France is always a creditor nation in its position toward the principal foreign markets. Gold will always flow towards France, and there is not the need of an artificial gold reserve such as we, for example, could hardly do without.

The Reichsbank.

The Reichsbank, or the central bank of Germany, is also privately owned, but is managed under direct governmental supervision. It has many hundreds of branches and makes itself felt in all parts of the Empire. Like the Bank of France this great bank is a bank not only for banks but for the people. With it, too, the direct policy is to give discount to all who ask it provided the notes for discount are legal for it to buy. The fact that a man wishing to discount a note has no account with the Reichsbank would not prevent his getting it discounted. The Reichsbank does not pay interest on the money deposited with it; but makes it of advantage to most large houses to keep an account with it, doing a large transfer business for them. Large banks also keep much of their reserve with the Reichsbank. The bank purchases government securities, largely in the form of very short time notes. It also acts as the fiscal agent of the government and as such performs very good service owing to its many branches. It is primarily, as the management of

the bank has stated, a public institution which is to care for the public interest, and secondarily a money making institution.

The Reichsbank Has a Monopoly of Issue.

The Reichsbank now has a monopoly of the right of bank note issue in Germany. One of its first duties it considers is to regulate the amount of currency in the country, but unlike the note issue of the Bank of France its maximum issue is regulated by the amount of precious metals it holds. It may cover these metals with its notes, then the amount of government notes it holds, then it may issue a certain and definite amount of uncovered notes, then it may cover with its own notes the notes of other banks held by the Reichsbank. After this sum, it may issue more notes on which there is a considerable tax, but its maximum note issue shall never be greater than three times the amount of precious metals and government notes it holds. The amount of silver it can hold is dependent on a protective regulation. Moreover, all notes issued in excess of precious metals and government notes held must be covered by bills discounted, the form of these bills being regulated by law.

England, France and Germany Have Other Than Central Banks.

In England, France and Germany there are, of course, beside the central institution, many banks, some of them formed for special purposes such as to encourage agriculture, to aid general business, or to finance large undertakings. These are all built, however, especially in France and Germany, about the central bank and have grown largely dependent on it. In most cases the other banks regard profit to themselves as of chief importance, though this profit is dependent on all usefulness that is consistent with it.

Each of These Countries Has a Central Reserve.

From such examples as the great banks and banking systems of Europe we can learn many lessons. As has been shown, each country has its own individual conditions, and the same problems in different countries may not necessarily be solvable in the same way. Much that older nations have discovered, however, we should pay great attention to. It seems as if we should profit by the application of at least some of their methods to our younger and cruder finance. There is one staring factor in the financial system of Europe which we have not till lately had here that must at

once catch the eye of the investigator. It is that every one of the countries we have examined has a central reserve compounded of all the reserves of the different financial units of the country and all ready for immediate use when needed most.

Banks Must Have a Large Gold Reserve Available.

From a review of the banking we have examined in the foregoing pages, it seems clear that any body of men engaged in any extensive banking operations should have a definite capital unchangeable as to the minimum of such capital. The more surplus or additional capital that can be made available in addition to the original minimum capital, the better for the strength of the organization. Equally important, however, with a consideration of the capital and surplus of an institution is the reserve of a bank. In banking it is as easy to do too much perfectly good business on the capital employed as in the average of mercantile affairs. Bank reserves are to be considered in the next chapter. Suffice to say that a history of the world's banking shows clearly that in all good banking (first), there must be a very strong gold reserve, stronger for reserve agents than for others (second), there must be secondary reserves which can be quickly converted into gold if necessary.

Banks are Public Servants, but They Must Make a Profit.

If capital is employed, and if it is to be true capital, it must increase, and for this reason a bank with capital can afford to keep as reserve only enough to insure safety to its depositors. Banks in this country are institutions formed to show a profit and as such, if they serve their depositors by insuring the safety of deposits by the amount of their capital, they should be entitled to a fair return on that capital. As a matter of fact, banks stand in a peculiar position to the community, for they are so sensitively tied to the business life around them that oftentimes when they have great opportunities for profit they are morally bound not to take advantage of them. On the other side, it is to be said that over a period of years it is best for the profits of banks in general that they should not take advantage of such opportunities. Abroad, in the older banking communities, this moral obligation is felt far more keenly than it is here. There, with the large banks and the single control of the discount markets, public and government influence is enough to keep the banks from using their great power arbitrarily if the temptation shows itself, which from the spirit of banking abroad cannot be often. In this country less of this influence is at work, or if it is at work there is not so general a way of making it felt.

We Have Had No National Discount Market.

We have till lately had no national discount market, and we have had to trust largely to the particular banker with whom we dealt as to what a fair rate of discount was and to the active competition between banks. As a matter of fact, however, though rates for four months' loans may vary a half of one per cent between New York and Chicago, it is owing to unequalized local conditions. The spirit of fairness in our banking, coupled with competition of banks, has been enough to prevent exorbitant rates over any period.

Bank Stock is Not a Desirable Investment for Women.

We have seen that banks are to some extent forbidden to take advantage of certain great opportunities for profit which occasionally arise, whereas in other businesses no such restrictions are evident. Unless it is felt by an investor, therefore, that stock of a bank under its management is a particularly safe investment, that stock is, comparatively speaking, not so profitable an investment as is the stock of a company engaged in some other business. Other things being equal, the rate of return on bank stock is apt to be less than on the stock of equally successful corporations in other

lines. Moreover, on most bank stock there is a liability in case of failure. Unless an investor, accordingly, is to derive other benefits from holding bank stock, such as intimacy through the board of directors with other banks or with business conditions, that stock is not a desirable investment. For women it cannot be regarded as suitable unless under exceptional conditions.

Banks Perform Many Services.

All banks are used as depositories of money wealth for many reasons. The keeping of a constant account with a bank in this country carries with it usually the right to claim a fair share of the money the bank is willing to lend for certain portions of the year. If a man is a large borrower, it is essential for him to win the good will of a bank, through keeping a deposit with it, the size of his deposit varying with his needs. Then, too, the keeping of a deposit with a bank opens to the depositor the experience, judgment and advice of the bank's officers. It also gives to the depositor many of the facilities for gaining information that are available to the men in charge of the bank. It is as safe holders of accumulated wealth, however, that banks first arose, and it is in this province that they perform their most important functions.

Banks Can Invest More Successfully Than Can Individuals.

Banks can protect wealth better than individuals can and yet give all the advantages to the owners that they had originally. Having once got money in large amounts with the tacit permission of the depositors to turn this into capital, banks can, because of their size, wield it to show an increase in geometric proportion better than individuals can. There is a point of diminishing returns in the banking world as in those of other businesses, but it is far removed from small sums. It is seldom that a bank is not better able to invest all its money to show an average greater return than is the small investor. This is partly because it has money to lend in bulk; chiefly, however, because its officers are students of fundamental business conditions and can pick and choose its investments to greater advantage than can an individual.

A bank acts as a clearing house of information. The fact being known that it is likely to have money to lend makes all possible borrowers appeal to it for loans. It thus gets a broader view of the loan market than its customer can. Also, many different men in different trades being interested in a bank through having deposits with it, the bank profits through its opportunity to obtain specialized advice.

Banks Should Diversify Their Investments.

Occasionally one sees a bank or a group of banks living the narrow life of making their loans all among one class of customers, such as shoe and leather merchants or mill treasurers. This may be necessary owing to the depositors being all of this class, or it may be deemed advisable because the men who have charge of the bank know well the trade to which the loans are made and do not know well other business borrowers. If the particular trade has a period of difficulty, however, the bank usually feels the strain greatly. If possible it is best for a bank to distribute its loans over a somewhat varied field. It is the doing so that builds up the strongest banks and it is largely the chance to do so that makes the bank a more desirable investor of funds than their owners are.

Diversified investment, coupled with a list of loans in which no borrower greatly predominates, practically insures a bank against many losses coming at once. Moreover, if the officers of the bank study fundamental business conditions, and contract and expand the loans in accordance therewith, losses are practically eliminated. If a mistake is made and a loss does occur it is not seriously felt, especially if the bank has a proportionately fair amount of capital and surplus.

Banks Should Compete in Other Things Than Interest.

The difference, if any, between the interest that a bank pays on its deposits and the interest the owners could get at first hand, is the insurance the original holders of the deposits are willing to pay to protect themselves from any possible loss in making their own investments, or the interest they are willing to pay for the good will or convenience of the bank. In savings banks such as we have in the United States today, the interest which the bank pays is, if anything, greater than that which the owner of the deposit drawing interest could with safety expect to get for himself; but in the case of national banks, trust companies, etc., it is often less, and for these the preceding law is governor of the amount of the deposits. It is for the advantage of such banks, therefore, to aid their depositors in every possible way they can and to make depositing with them attractive. It is in this attraction that the competition should and must come. Mercantile banks can afford to pay something on many of their deposits; but competition between them should not take the form of a war of interest.

Exceptionally High Rates on Deposits Are Usually Not Desirable.

A mercantile bank which pays on deposits an unusually high rate of interest, unless it has an

exceptional surplus, is forced from this very fact when it enters into competition with other banks for buying the loans from which it makes its profit, to choose those loans which bear the highest rate of interest. Many of these may be passed by its competitors owing to lack of security or because of a less serviceable maturity. Its investment list is apt to be a comparatively weak one. The bank, therefore, that, when paying interest on a deposit which can fairly claim the right to interest, pays what in its community is regarded on the average as a *fair* rate, is usually a much stronger institution, other things being equal, than the bank paying a *higher* rate. Three per cent may be taken as a maximum that commercial banks should pay on deposit accounts. No interest should be paid on borrowing accounts.

Banks Must be Safe Depositories for Money.

The first province of a bank is to safeguard the available wealth entrusted to it. From the beginning of banking this is apparent. For this purpose primarily banks were instituted and all other duties and opportunities of a bank are secondary to it. The protection of general credit by a bank, the aid which it must extend to its government in times of need, are most important; but they are as nothing if in fulfilling these duties the bank fails to safeguard its depositors. Everything beyond

the line of absolute safety of its deposits must be avoided in any proper banking system. The bank is chiefly a public servant. It exists to take charge of the available wealth of its community, to foster it, to increase it if possible, and by so doing to aid its community in the best way economically that it can. If in this work it can show a profit for itself, well and good, but its foremost duties are clear and explicit.

Most Banks Appreciate Their Foremost Duty.

Nothing can be so shocking to a civilized community, eager to advance, and storing an available wealth to accomplish this purpose, as a bank failure. Fortunately in this country there are few banks today that do not take the attitude of trustees of available wealth, not only for the sake of their depositors but for the sake of the community in general.

CHAPTER VI

THE REDISCOUNTING OF COMMERCIAL PAPER.

MANY individuals and corporations have surplus money to invest for a short time. When suitable means of investigation and reasonably sure information regarding business conditions are at hand, there is nothing so fitting for such investors as the best commercial paper of the desired maturity. We have seen that commercial paper, if properly issued, is secured by the most salable sort of collateral with a margin of safety back of it. As it has but a short time to run, it expresses especially well the going rate of interest. There is small danger that the paper cannot be converted into cash at its maturity, and there should be no danger of a loss or that a large commission will have to be paid in procuring that cash, as is possible in the case of even a standard long time bond or similar security when bought to hold for a short time.

Individuals or Corporations Investing in Commercial Paper Do Not Usually Need to Resell.

Most individuals or corporations having funds applicable for the discounting of commercial paper, can foretell very nicely just how soon they will

need the money which they are to put at interest. Moreover, such individuals do not have very large sums to invest in this way. They can almost always, therefore, pick the maturity they need, buy the paper they choose, and simply put it away till it matures with no thought of needing to raise even a part of the money. they have let at a time prior to the time they have specified in their own minds. If they do need to rediscount any of their paper investments, the amount they wish to market is usually so small that their own banks or friends can and will absorb readily all that they desire to sell. For such investors as these, so far as their needs are concerned, there is no great necessity of any opportunity for rediscounting commercial paper.

Banks Often do Need to Resell Commercial Paper.

The case of banks is very different. Banks, like private investors and like corporations in their slack periods, figure nicely as to when they will need their money and very largely invest in commercial paper such money as they may need within a comparatively short time. Oftentimes when the maturity of the notes taken arrives, these institutions do not need the money they receive and again discount paper. Banks being fiduciary agents should always prepare for a larger amount of maturities than a smaller one over or under what they think they may need at the time they are likely

to be drawn or called on to discount their own customers' notes. Very often, however, though finding the investments they wish, as they deal in large amounts, banks cannot get just the maturity they most desire. Unless they feel strong enough to take a less valuable maturity, they are forced either to lose through not putting their money at interest or to discount paper of which they have less knowledge or which they admit is not as strong as that first selected. For such cases as these some general system for rediscounting commercial paper is essential.

England Has a Large Surplus Always Ready for the Rediscounting of Paper.

In England, the London banks are able to carry very large reserves, and buy only very short time receivables or like paper with the money they think they may shortly need. In the United States there is but a small amount of very short time paper available for discount, and with our smaller capital for the work to be done reserves do not so readily accumulate. As banks are acting for a very large number of active businesses, even the active bank officers—unless they are very careful students of fundamental conditions—are apt to make a mistake in judgment as to when a call for money is coming either in the shape of a withdrawal of deposits or for the discounting of

customers' paper or both. It is essential, oftentimes, for banks to rediscount commercial paper. In order to allow banks to purchase the best paper that they feel is offered them and to permit them to prepare for any emergency, some general method of rediscounting commercial paper should be in vogue.

We Have No Large Sums Available for This Purpose.

Mercantile banks array their investments somewhat in the form of the reserves of an army. Their first reserve is cash. Their secondary reserves are apt to be call loans and short time active collateral loans. Their third reserves have been, as a rule, commercial paper. This has been often well in the rear and more than occasionally very slow in reaching the front in time of trouble. There has been till lately no quick way of hurrying any large amount of this third reserve into action.

We Have Accommodated Ourselves to the Situation.

The principal method we have adopted to get around this difficulty has been in time of pressure for one bank to borrow from another. The result is that banking in this country has brought about a system by which banks outside the centers gain the good will of larger banks in the central reserve cities and arrange with them to lend them money

or to buy their commercial paper if need for money unexpectedly arises. The banks in the centers, taught by past need, have built up a system by which through the clearing house of their city they may borrow in need from a credit based on the pooled strength of the clearing house members. Note brokerage houses have also arranged oftentimes with their bank customers to buy back any paper which they have sold should the purchaser wish to resell and should the money market admit of repurchase.

Our System Has Proved Moderately Effective.

In this way an extensive system for the rediscounting of commercial paper has been built in this country, based on the real need for such a system. It has worked fairly well, but in times of general stress or panic this system has thrown too much weight on the shoulders of the larger banks in the central reserve cities with a large list of country correspondents. With no system for pooling reserves the country over, our national bank system has not permitted the rediscounting of commercial paper in the volume and with the ease that has seemed at times essential. A cursory glance at the French system, for instance, as outlined in previous pages of this book, reflects the system that has been in vogue in the United States in a very unfavorable fashion.

France and Germany Have Prepared Especially for the Rediscounting of Commercial Paper.

The large English banks, other than the Bank of England, usually do not call on the Bank of England when they are at all pressed to rediscount their bills; but the Bank of England is there with the chief reserves of the nation ready to make use of them in any legitimate manner that will best remedy a disturbed situation. The mere moral support of such a quick reserve as England has undoubtedly does much to support English banking. The knowledge is general that if any bank depositing with the Bank of England wishes to rediscount its bills it can do so. In France and Germany the situation as regards the rediscounting of commercial paper is even better. The Bank of France in France, and the Reichsbank in Germany, hold the reserves of their country chiefly to discount notes, that is, commercial paper, brought to them for discount. As any large drain on these reserves would have to come from the banks, it is for these chiefly that the reserves are held, and to assist these in maintaining a sound banking system. In both France and Germany, however, legislation and custom have gone farther than to supply a great central reserve fund, an accumulation of the reserves of the separate units in the systems headed by the Bank of France and by the Reichsbank. In both of these countries, provision

has been made far above the usual needs of the country. Each has a currency system which serves as legal tender and which is applicable for the discounting and the rediscounting of commercial paper in times of exceptional demand. The German scheme is more conservative than the French; but this is possibly because the need of conservatism is greater in Germany. Both plans produce the same result, as does the English central reserve on a smaller scale. They arrange for short time financial aid to any individual, firm, bank, province or, in fact, to the whole country, and without any marked disturbance of money rates.

With Foreign Banks Commercial Paper Forms Largely the First Reserve.

The result is, coupled with the fact that in England, France and Germany short prime commercial paper is well secured, that in these countries commercial paper forms the first reserve of the banks. Each bank knows that if it needs money, provided its paper is in the carefully guarded form prescribed by law or custom, it can at once obtain practically any amount of money it wants by rediscounting its paper at the central institution. It also knows in France and Germany that if there is need, the supply of money will be raised to suit the immediate demand, so that no very serious effect on interest rates in the country will follow a sudden demand for large discounts. Business can be

done on a comparatively small cash reserve in the vaults of the bank, provided a reasonable reserve is kept with the central bank. Central reserves, apart from any right of note issue that may go with them, do two things. — (a) They permit safe banking in ordinary times on a smaller aggregate reserve than in the case of a series of units none of which are connected — (b) They permit the rediscounting of large amounts of commercial bills or paper with ease in times of stress or panic. Incidentally these two results of a central reserve system make borrowers more ready to confine their borrowings to the limits laid down by the central reserve institutions regarding bills they will discount. Borrowers find that there are great advantages in having commercial paper so secure that a great central bank will take millions of dollars of it, even in a panic. In order to do this without endangering any of the units of the system dependent on the bank, they do not complain of any restrictions laid on the form their notes shall take.

There is Need for a Somewhat Similar System in the United States.

The right of a central bank to issue credit notes is a study by itself. We are now trying for the first time in recent years a law permitting an asset currency on a large scale. It is interesting to note the results of such a system where it is practised

abroad. The United States is a far larger and newer country than are the foreign nations whose banking we have examined. Moreover, the demands on the capital employed are much more extensive and for longer periods of time, as a rule, than are the demands on capital in England, France or Germany. Whether we are in a position to maintain a large asset currency successfully is still to be proved. It is evident, however, that the closer association we can have between the reserves of banks the better. Clearing house organizations have done much to wield the reserves of the clearing house banks as one. We need, however, a considerably more extended bond than this, one which will not only draw together the reserves of national banks in one city, but a something which will bind together the reserves of all central reserve cities in the country. This we have now obtained through the Federal Reserve Act.

Our Bank Reserves Must be Bound Together.

We are constantly hindered in economic endeavor by the shifting of political power from one group of men to another within comparatively short terms, and by the interference of men raw at their work, however good they may be. What we required is what we have now obtained through the Federal Reserve Act, an organization to bind together the reserves of the banks of the country

which will be absolutely out of politics. This cannot have money-making as its prime motive and must be, as it is, in the hands of men who regard it as the greatest honor to be in charge and who are acknowledged as at the top of the banking profession. It is needless to say that these men are above the suspicion of wielding any power put in their hands for the benefit of their own interests.

An Asset Currency Has Many Dangers.

There have been many schemes for attaining the sought for end of a central reserve organization. Most of these have leaned toward the use of an asset currency to be used for rediscounting commercial bills. It should be borne in mind through any discussion of the subject of currency, that being given a certain population and a certain coinage system, the problem is to maintain that coinage in the correct ratio to the population engaged in business and to the business done. The solution of this problem means that money must be mobile and that hoarding of any large sums of money will be done away with. The doing away with the tying up of coin will prevent many panics and will mitigate the most severe panics. It will not prevent the rise and the fall of money rates within comparatively narrow limits and it will not permit facile business when naturally very high or inflated prices occur. It will not prevent panics

arising from an extension of credit. If a currency system is desired which will permit facile business on a basis of exceptionally high prices, or which will prevent such prices momentarily, a step further must be taken. But if this step is taken it must also be borne in mind that the path followed must be one which will protect the traveller from too sudden a fall.

It must be remembered that commodity prices adjust themselves ultimately to the credit supply, not of the nation but of the world. A high level of commodity prices, which is equalized on the other side by a currency founded on those commodity prices at their high level, is apt, when a change in the condition of credit occurs, to take a sudden decline. This greatly disturbs the currency of the country. It is the opinion of the writers that a reasonable variation of money rates in a community which has and uses a supply of coin suited for its normal business needs is not to be avoided. If at times exceptional work is called for on the currency of a nation it may be well to provide for an artificial assistance; but that assistance must be used as a powerful drug in the hands of a skilful physician. The patient must not be allowed to be dependent on it, and its use must be stopped the instant the patient can get along without its aid.

The Rediscounting of Commercial Paper is One of the Chief Duties of a Central Reserve System.

Any central reserve system must exist largely to discount commercial paper. There can be no better reserve for a bank than the best commercial paper, provided there is any sort of a discount market available. To encourage banks to use commercial paper at least as their secondary reserve on a large scale aids commercial enterprise greatly, strengthens the position of the banks, enables them to earn more money, and, last but not least, puts a stop to seasonable periods of great speculative activity in the stock market.

All this has been clearly brought out in the past few years, with the result that two questions have presented themselves to the banking world and to our legislators. First, should the reserves of the national banks in this country be pooled for the benefit of resisting any sudden demand from any quarter? Second, should credit beyond these reserves be granted through a note issue which should be legal tender, based on readily liquidating securities and taxed to the point where it could only appear when its usefulness was very great?

The Aldrich-Vreeland Bill Passed.

It was the panic of 1907 that was the moving instrument in procuring legislation combining reserves and providing for an asset currency, founded

on commercial paper, together with other modifications of our banking laws. Directly after the panic of 1907 the so-called Aldrich-Vreeland bill was passed allowing the use of certain commercial paper as a basis for currency when passed on by organizations composed of banks and when guaranteed by these organizations. This act was at no time regarded as more than a temporary measure and was considerably scoffed at as being difficult in its working and far from an efficient protection. It was a measure to mitigate money stringencies and panics after the event only; for no great preventive force was incorporated in the act. When real need for some such assistance occurred, however, in the first months of the Great War in 1914, it was to this measure that most banks turned. Millions of currency were at once made available, all of which lived only while needed, and all of which were retired without any disturbance before this act, under which they arose, passed out of being by limitation, a few months later. The successful working of this temporary measure is greatly to the credit of the men who drew it, and it is worthy of more than mere mention also as proving that an asset currency which could only appear with considerable difficulty on the part of banks brought no serious economic reaction. General credit, to be sure, was not in an extended condition when this act was taken advantage of. The successful working of the Aldrich-Vreeland plan, however, proved that the

mere fact of an asset currency being hard to bring into being was no detriment to that currency in this instance, provided that once brought into being it was large enough to cope with the situation. An asset currency more easily instituted, and perhaps more easily retained, might or might not have worked so well.

It is an Innovation in This Country to Have Commercial Paper as a Basis for Currency.

It must be remembered that we have had an asset currency in working operation for many years. Our present bank notes founded on government bonds are part of an asset currency. The introduction of commercial paper as a basis for such a system is, however, a great innovation. It makes the currency very elastic, whereas an asset currency based on government bonds is nearly inelastic. Commercial paper in itself, except in time of war, is, if properly used, undoubtedly safe as a basis for such a currency. France and Germany have been using it as such with success. The system under which it is planned this country shall operate its currency is adapted very well to use commercial paper as it exists with us, as a basis for circulation.

The Federal Reserve Act.

The Federal Reserve Act, approved December 23, 1913, was the outgrowth of much study and

discussion by bankers and legislators. Though not derived from the Aldrich-Vreeland Act or the bill drawn principally by Senator Aldrich which Mr. Aldrich intended should replace the Aldrich-Vreeland Act, it was largely dependent on a study of these two instruments. It was the most important banking act passed in our history since the Civil War. It was a new and a broad step in our banking progress. Our chief interest in this act in these pages is to consider it in its relation to commercial paper, and it is to be reviewed here in this light; but a short summary of the entire act seems serviceable even in this specialized connection.

Briefly the plan of the Federal Reserve Act is as follows:

1. Federal Reserve Board. *Seven members.*

Secretary of the Treasury, Comptroller of the Currency and five other members from different districts, appointed by the President, by and with the advice and consent of the Senate. These five men are to give their entire time to the service of the Board. Appointed members are to serve ultimately for ten years and are to receive \$12,000 salary. At least two of the five members are to be experienced in banking and finance. One is to be appointed Governor and one Vice Governor. The Federal Reserve Board shall have the power to examine all Federal Reserve Banks, to permit, or on the vote of at least five members of the Board, to require any Federal Bank to rediscount the discounted paper of other Federal Reserve

Banks at rates of interest to be fixed by the Federal Reserve Board; to suspend for a period not exceeding thirty days, and to renew such suspension by fifteen day periods, any reserve requirements specified by the act. (A heavy graduated tax shall be levied if reserve requirements be permitted to fall below specified percentages.) To regulate the issuance of Federal Reserve notes; to suspend or remove Federal Reserve Bank officers; to review and determine, in conjunction with the directors of each Federal Reserve Bank, rates of discount to be charged by each of the Federal Reserve Banks, for each class of commercial paper; to make reports of condition of Federal Reserve Banks.

2. Federal Reserve Banks.

The number of these banks is to be determined by the Federal Reserve Board, but there are to be in number not less than eight, nor more than twelve. Capital is to be at start not less than \$4,000,000 each. Each Federal Reserve Bank is to be governed by a Board of Directors of nine members. Three of these members shall be representatives of member banks. Three of these members shall be representatives of commercial, agricultural and industrial interests in their Federal Reserve district. Three of these members shall be appointed by the Federal Reserve Board. No senator or representative shall be a member of one of these boards or of the Federal Reserve Board. No director elected to represent the commercial, agri-

cultural or industrial pursuits of a district shall be an officer, director, or employee of any bank. No director appointed by the Federal Reserve Board shall be an officer, director, employee, or stockholder of any bank. The Federal Reserve Board shall appoint a Chairman of the Board of Directors of each Federal Reserve Bank. (The cities designated as Federal Reserve cities are: New York, Chicago, Philadelphia, Boston, Cleveland, San Francisco, Minneapolis, Richmond, St. Louis, Atlanta, Kansas City, Dallas.)

Present national banks, to retain their charters, must become members of this new system; other banks may become members of this system. Joining the system consists of subscribing to the capital stock of the Federal Reserve Bank of their district, in a sum equal to 6 % of the capital stock and surplus of the bank in question. The capital of each Federal Reserve Bank is to rise and fall according to the capital and surplus of member banks in its district. Shares shall be \$100 each. Banks taking the required amount of stock of a Federal Reserve Bank shall be known as "Member Banks." The Federal Reserve Board may permit public subscription to the stock of Federal Reserve Banks, but no individual, co-partnership or corporation, other than a member bank shall be permitted to hold stock at any time of more than \$25,000 par value of any Federal Reserve Bank. If the total subscriptions by banks and the public to Federal Reserve Banks' stock is insufficient, the

United States shall take the remaining amount. After all expenses, stockholders shall be entitled to receive a cumulative dividend of 6 % on the paid-in capital stock of each Federal Reserve Bank. All net earnings beyond this shall be paid to the United States, except that one-half shall be paid into a surplus fund until it amounts to 40 % of the paid-in capital stock of each bank. Net earnings derived by the United States may be used to supplement the gold reserve against United States notes, or shall be applied to the reduction of United States bonds. There shall be a Federal Advisory Council to consist of as many members as there are Federal Reserve districts, each Federal Reserve Bank to have one representative. This Board shall meet at least four times each year in Washington, to confer with the Federal Reserve Board.

3. Powers of Federal Reserve Banks.

To use a corporate seal. To have a twenty-year charter. To make contracts and to be parties to suits. To issue notes against United States bonds. To accept deposits from member banks and from the United States. "Upon the endorsement of any of its member banks, with a waiver of demand, notice and protest by such bank, any Federal Reserve Bank may discount notes, drafts, and bills of exchange arising out of actual commercial transactions: that is, notes, drafts, and bills of exchange issued or drawn for agricultural, industrial, or commercial purposes, or the proceeds of which have been used or are to be used for such

purposes, the Federal Reserve Board to have the right to determine or define the character of the paper thus eligible for discount, within the meaning of this act. Nothing in this act shall be construed to prohibit such notes, drafts and bills of exchange, secured by staple agricultural products, or other goods, wares, or merchandise from being eligible for such discount; but such definition shall not include notes, drafts, or bills covering merely investments or issued or drawn for the purpose of carrying or trading in stocks, bonds, or other investment securities, except bonds and notes of the Government of the United States. Notes, drafts and bills admitted to discount under the terms of this paragraph must have a maturity of not more than ninety days: Provided, That notes, drafts and bills drawn or issued for agricultural purposes or based on live stock and having a maturity not exceeding six months may be discounted" in a limited amount.

"Any Federal Reserve Bank may discount acceptances which are based on the importation or exportation of goods and which have a maturity at time of discount of not more than three months' and endorsed by at least one member bank." The amount of such acceptances that a Federal Reserve Bank may discount is limited.

It is also provided that any member bank may accept drafts or bills of exchange drawn upon it and arising out of transactions involving the importation or exportation of goods having not more

than six months' sight to run, to an amount limited by one-half the capital stock of the member bank discounting.

4. Open market operations of Federal Reserve Banks.

Under regulations of the Federal Reserve Board they may purchase and sell in the open market cable transfers, bankers' acceptances and bills of exchange that are eligible for rediscount, with or without the endorsement of a member bank. They may deal in gold or make loans thereon. They may buy and sell United States bonds and notes, also notes having not more than six months to run that were issued in anticipation of taxes. They may buy from member banks and sell with or without their endorsement, bills of exchange arising out of commercial transactions.

5. Government deposits may be deposited by the Secretary of the Treasury in Federal Reserve Banks.

6. Note issues.

Federal Reserve Banks may issue notes. These shall be obligations of the United States. They may be redeemed in gold. They shall be covered by collateral. This is to be notes and bills, accepted for rediscount by the Federal Reserve Bank issuing the notes, and in amount equal at least to the face of the Federal Reserve notes being issued. More collateral may be called for.

7. Reserves.

"Every Federal Reserve Bank shall maintain

reserves in gold or lawful money of not less than thirty-five per centum against its deposits and reserves in gold of not less than fifty per centum against its Federal Reserve notes in actual circulation, and not offset by gold or lawful money deposited" as such an offset. Federal Reserve notes received by a Federal Reserve Bank not issuing them shall be promptly returned to the bank of issue for redemption or credit. No Federal Reserve Bank shall pay out notes issued through another under penalty of a ten per cent tax. The Federal Reserve Board may reject the request of any Federal Reserve Bank to issue notes. The gold reserve requirements may be suspended by the Federal Reserve Board, provided a heavy tax is imposed.

8. "Every Federal Reserve Bank shall receive on deposit at par from member banks or from Federal Reserve Banks checks and drafts drawn upon any of its depositors."

9. Provision is made for the retiring of United States bonds having the circulation privilege.

10. Member banks not in a reserve or a central reserve city must keep reserves of 12 % of their demand deposits and 5 % of their time deposits.

Member banks in a reserve city must keep reserves of 15 % of their demand deposits and 5 % of their time deposits. Member banks in a central reserve city must keep reserves of 18 % of their demand deposits and 5 % of their time deposits.

Examinations of member banks are provided for.

Provision is made that any member bank not situated in a central reserve city may make loans secured by improved and unencumbered farm lands, but only to 50 % of the value of such property, and for no longer than five years.

Branch banking in foreign countries is provided for.

The Federal Reserve Act Strictly Limits Paper that May be Rediscounted.

Such are the principal provisions of the Federal Reserve Act. Where these have to do with commercial paper it is likely that they define principles on which the issue of commercial paper in this country will largely depend in the future. This is, first, that it may be eligible for discount in the central discount market provided by the Federal Reserve Banks, and second, that it may be a basis for Federal Reserve notes. We must remember that this paper was required to be made to finance actual commercial or agricultural transactions, and not to buy or carry stocks or bonds. The importance of this we have seen in previous pages, where stress has been laid on liquid assets. Except in the case of loans issued for agricultural purposes, or based on live stock, paper eligible for discount must have a maturity of not more than ninety days. The Federal Reserve Board has defined the paper that is eligible for discount by the Federal Reserve Banks to a further

degree by various circulars which it has issued. The Federal Reserve Board has set itself on record as defining commercial paper eligible for rediscount as that paper only the proceeds of which have been used or are to be used in producing, purchasing, carrying or marketing goods in one or more of the steps of the process of production, manufacture or distribution. The Board has gone even further than this and has stated that no commercial paper is eligible for discount by the Federal Reserve Banks the proceeds of which have been used or are to be used for permanent or fixed investments of any kind, such as land, buildings, or machinery. "It may be considered," the circular goes on to say, "as sufficient evidence of compliance with this requirement if the borrower shows, by statement or otherwise, that he has a reasonable excess of quick assets over his current liabilities on open accounts, short time notes, or otherwise." The circular also states that no bill is eligible for discount, the proceeds of which have been used or are to be used for investments of merely a speculative character, whether made in goods or otherwise.

One exception has occurred in the case of notes of cotton mills eligible for rediscount, provided the mill has a debt against the plant not exceeding \$5.00 per spindle. It is obvious from this definition of commercial paper that it is the opinion of the men selected to protect the general banking situation of this country, that commercial paper must

be issued only along clearly stipulated lines, and that any financing outside of these defined limits does not fall in the category of true commercial paper, and must be considered by itself and treated differently.

Further circulars issued by the Federal Reserve Board and by the Federal Reserve Banks provide that member banks applying for rediscount of their paper must certify that to the best of their knowledge and belief the financial condition of the company making the paper is such that the paper falls in the category of paper eligible for discount with the Federal Reserve Bank. This means that statements should be available that are signed, and preferably audited, and of recent date. The Federal Reserve Banks request on their form of statements reports as to accommodation endorsements, contingent liabilities, pledged assets, insurance carried, and the usual items making up the assets and the liabilities of a borrower. It is stated, however, that in the case of warehouse receipts or true receivables the request for statements may be waived.

Further Definitions of Commercial Paper Eligible for Discount with the Federal Reserve Banks.

It has also been stated, with the approval of the Federal Reserve Board, that besides the notes issued to buy merchandise, to pay for the cost of

manufacture, or to carry or market such merchandise or manufactured product, and not having over ninety days to run, notes secured by merchandise or commodities, not having over ninety days to run, shall be eligible for discount; also farmers' notes, the proceeds of which have been used for the purchase of live stock, or for planting, harvesting, or distributing crops, if such notes have a maturity of not over six months from the date on which they are offered for rediscount to a Federal Reserve Bank. Notes on demand are not eligible, nor notes of mercantile concerns, the current liabilities of which are in excess of quick assets. The same is true of notes of railroads and public service corporations.

It is impossible, of course, often to say that each particular dollar received for any one note goes into quick assets. For this reason it is considered sufficient evidence that such money or its equivalent has gone into the required quick assets if the individual partnership or company signing the note presents a statement under recent date showing a proper excess of quick assets over debt, and if the general knowledge of the company in question enables the member bank discounting to state that to the best of its knowledge and belief the proceeds of the notes presented for discount, or their equivalent, have gone into the required quick assets.

It is to be noticed that the stipulated maturity of paper presented for rediscount refers only to

the unexpired time the notes have to run. In other words, banks may buy millions of commercial paper with varying maturities and at any time may present for rediscount that portion of the paper having left not over ninety days to run, or as otherwise stipulated. Any bank buying from month to month a generous amount of from four to six months' paper will in this way always have a large amount that is eligible for rediscount in the central discount market, provided by the Federal Reserve Bank of its district.

The Federal Reserve Act and the regulations of the Federal Reserve Board all express a great faith in commercial paper that is issued in the carefully stipulated manner. We have seen that commercial paper does not express its purpose in its form. The questions that the Federal Reserve Banks ask to bring out that the paper is eligible for rediscount are consequently necessary. Paper that is issued, however, to carry over the peak of the loan, that is, paper of companies that "clean up" every year, is trusted, and is trusted with authority. It is hard to bring out by any set of questions from any board the moral caliber of the managers of the company whose paper is under consideration. This is too important a matter to be neglected by any buyer of paper. In addition to any principles laid down for selecting commercial paper, therefore, that do not include the question of moral fitness, the prospective buyer should satisfy himself that the men issuing the paper are upright

men and that their business is being conducted in an upright way that is of service to the world.

The Plan of Operations of the Present Federal Reserve Banks are Not Necessarily Final.

Undoubtedly the future will change somewhat the requirements of commercial paper that is eligible for rediscount in the central discount market provided or to be provided by our government. The entire plan of a central bank or banks may change. The late Senator Aldrich, in his bill, outlined a plan differing considerably from the plan now in operation. As an example of some changes in the present act which future years may again suggest, the principal provisions of this bill are given:

The Plan of the Aldrich Bill.

Section 1 provided for the establishment of the National Reserve Association of the United States for a period of fifty years. Provision was made for the capital to be equal in amount to twenty per centum of the paid-in and unimpaired capital of all banks eligible for membership. Provision was made for the immediate subscription of \$200,000,000 of this capital and for the head office to be at Washington.

Section 3 provided that all national banks, and all state banks and trust companies, complying with the requirements for membership in the National Reserve Association, might subscribe to an amount equal to twenty per centum of the paid in and unimpaired capital of the subscribing bank, no more, no less, and might become a member as was provided. Special regulations were set forth to govern the admission of state banks and trust companies.

Section 5 provided that there should be fifteen branches or districts of the Association, one in the New England States, two in the Eastern States, four in the Southern States, four in the Middle Western States and four in the Western and Pacific States, the districts to be formed and readjusted according to business needs and not along state lines.

Section 6 provided that all subscribing banks in each district should be grouped into local associations of not less than ten banks each, each local association to have an aggregate capital and surplus of at least \$5,000,000. The grouping was subject to certain provisions relative to business needs; each of the local associations was to be a corporate body, and each subscribing bank could belong to one local association only.

Section 8 provided for a board of directors for each of the branches of the National Reserve Association, the manager of the branch to be a member of the board. Provision was made for the representation on the board of each branch of agricultural, commercial, industrial and other interests through men who, while they served, should not be officers nor directors of financial institutions.

Section 9 provided for a board of directors of the National Reserve Association, and for their equitable selection so as to represent each branch of the National Reserve Association. The agricultural, commercial, industrial and other interests of each district were also to be represented, and by men who, while they served, should not be officers of any financial institution. Provision was also made for representation of the government. Provision was made that no member of any national or state legislative body should be a director of the National Reserve Association or of any of its branches or of any local association.

Section 10 provided for the proper choosing of the governors of the National Reserve Association.

Section 12 provided for the non-transfer of shares in the National Reserve Association, and for their non-hypothecation or sale. Provision was made that debts to the association from any subscribing bank that might become insolvent should be a first lien on its paid-in capital stock.

Section 14 provided for the selection of an executive com-

mittee of the association and for its duties. The bill went on to provide for proper examinations and elections in all departments of the Reserve Association, for an equitable distribution of profits in which the government should largely share, for uniform rates of discount, for the purchase of government bonds, for proper reserves and for the non-payment of interest on deposits, also for the dealing in gold and in certain securities of international value.

Section 20 read as follows: —

“Any member of a local association may apply to such association for a guaranty of the commercial paper which it desires to rediscount at the branch of the National Reserve Association in its district. Any such bank receiving a guaranty from a local association shall pay a commission to the local association, to be fixed in each case by its board of directors. Expenses and losses in excess of commissions shall be met by an assessment of the members of the local association in proportion to the ratio which their capital and surplus bears to the aggregate capital and surplus of the members of the local association, which assessment shall be made by its board of directors, and the commission received for such guaranty, after the payment of expenses and possible losses, shall be distributed among the several banks of the local association in the same proportion. A local association shall have authority to require security from any bank offering paper for guaranty, or it may decline to grant the application. The total amount of guaranties by a local association to the National Reserve Association shall not at any time exceed the aggregate capital and surplus of the banks forming the guaranteeing association.”

Section 26 provided that the Reserve Association might rediscount through a branch for and with the endorsement of any bank owning association stock, notes and bills of exchange arising out of commercial transactions, provided such notes and bills of exchange had a maturity of not more than twenty-eight days and that they had been made at least thirty days prior to the date of rediscount.

Section 27 provided that the Reserve Association might also rediscount for and with the endorsement of any bank owning association stock, notes and bills of exchange aris-

ing out of commercial transactions having more than twenty-eight days, but not exceeding four months to run, provided such paper was guaranteed by the local association of which the bank asking for rediscount was a member.

Section 28 provided that when approved by the Secretary of the Treasury the Reserve Association might discount the direct obligation of a subscribing bank endorsed by its local association, provided that the endorsement of the local association was fully secured by pledged securities.

Section 31 provided for authority for national banks to accept a limited amount of drafts and bills of exchange drawn on them and having not more than four months to run, properly secured, and arising out of commercial transactions.

Section 32 provided that when conditions warranted the Reserve Association might purchase from a subscribing bank acceptances known as prime bills having not over ninety days to run, endorsed by the seller, the seller being other than the acceptor.

Section 41 provided for a tax of 1 1-2 per cent for each 2 1-2 per cent or fraction thereof that the reserve fell below 50 per cent, also that no circulating notes should be issued so long as the reserve fell below 33 1-3 per cent of its outstanding notes.

Section 50 provided that all notes of the Reserve Association should be covered by legal reserves and by notes or bills of exchange arising out of commercial transactions, as described.

Section 51 provided a tax, subject to one minor provision, of 1 1-2 per cent on all notes outstanding in excess of \$900,000,000 which were not covered by lawful money, and a tax of 5 per cent on any notes not so covered in excess of \$1,200,000,000.

Section 53 made circulating notes of the association legal tender.

The principal difference between Senator Aldrich's bill and the Federal Reserve Act was that by Senator Aldrich's bill there was incorporated one central bank, with branches which should be

in direct control over the banking situation of the country, instead of twelve parallel banks all operating under the advice of a central board. Another difference was that by making use of groups of member banks, and requiring the endorsement of such groups, paper longer than ninety days might be eligible for rediscount. It was also stipulated that the ordinary reserve should be 50 %, and that a heavy tax should be levied for any decrease in the reserve below this figure. The bill also stated that no circulating notes should be issued so long as the reserve fell below $33\frac{1}{3}$ % of the notes of the central bank. This is a provision unincorporated in the Federal Reserve Act, though the Federal Reserve Board has power to stop note issues.

There are Views Opposing a Greatly Fluctuating Currency.

President Hadley of Yale, in his "Economics,"¹ says in a review of credit, note issues and a central bank:—

"The concurrent increase of credits (arising from the discounting of notes and subject to check) may continue until the liabilities of banks become disproportionate to their reserves. When the public perceives this there is a sudden shock to confidence and a withdrawal of accommodation, which causes far greater distress than would have

¹ Written in 1896.

resulted had the facilities of payment by credit been less elastic at the outset.

"This danger is very much greater when bank credit takes the form of notes instead of checks. Credit given in the form of a deposit account is exhausted in a short time, because the checks drawn against it soon come back to a bank for redemption. But credit in the form of notes may remain outstanding for an indefinite period. These notes may change hands a thousand times before returning to the bank. If prices begin to increase, from any cause whatsoever, this increase furnishes a ground for an enlarged issue of notes on the same physical volume of business. This goes on until prices and currency both become so inflated that people see the danger and suddenly refuse to accept notes as the equivalent of money. If the note issue is very large in proportion to the coin available such a change of sentiment may come at almost any moment."

President Hadley goes on to point out that bank note inflation does not always lead to serious disaster. Careful provision for note issue, he says, aids its usefulness greatly; but he adds:

"No method of organization of the banking system has been devised which will avoid these evils. Local banks and centralized banks have alike been subject to them."

"It is urged," President Hadley says, "both against the English and American systems that they are based on no philosophical or economic

principle. Each of them limits the issue of bank notes by a somewhat arbitrary line. Instead of furnishing an elastic currency that will expand or contract with the demands of business, they furnish a highly inelastic one. In England there is no available means of increasing the circulation except by suspending the Act of 1844. It has been pointedly said that the English Bank Act is of use only when it is rendered inoperative. What is done in England by suspension of the Bank Act is done in America by the issue of clearing house certificates in virtual disregard of the National Banking Law. Each of these things represents a breach of the statutory principle, justified only by a public emergency.

"Yet the necessity of thus suspending limitations in an emergency does not prove that the limitations themselves are unwise. The most important function of bank note issues, in a country which enjoys the benefit of the check and clearing house system, is to provide a reserve for emergencies. If we limit note issues in ordinary times we have a reserve power upon which we can fall back in extraordinary times. The objection to unlimited bank note issues is that they leave us no such reserve to fall back upon. If the currency is made thoroughly elastic in years of confidence there is no power of stretching it further in days of doubt. If the check system alone has been overstrained, a bank that has the power to issue additional notes can ease public confidence.

"If the public demand for the use of notes as well as checks has been supplied to the utmost, we have no further reserve at our disposal. For this reason an unphilosophical limit to note issue is far better than no limit at all. To prevent the recurrence of experiences like those of 1825 in England, or 1857 in the United States, the important thing is to have a limit to note issue and to have it low enough. Paradoxical as it may appear, the all important thing is that the bank note currency should *not* meet the wants of business in ordinary times; that it should not be sufficiently elastic at such times as to be unable to take additional strain in times of emergency."

The Federal Reserve Act Brings New Practice to This Country.

President Hadley did not know of the Federal Reserve Act when he wrote the foregoing. It is interesting, nevertheless, to apply his theories as to bank note issue in connection with this act. The Federal Reserve Act has carefully limited the use of credit notes and has taxed these notes severely, which is in itself a tremendous safeguard against overexpansion from them. The act, however, goes considerably further than President Hadley states a credit currency should go.

Mr. Morawetz has Presented Still Another View.

"The Banking and Currency Problem in the United States," by Victor Morawetz, develops still other points of view of central banking in this country. Mr. Morawetz states primarily that we must provide for the largest volume of bank credits that we can and yet have them on a safe basis. We must not do this, he says, by increasing reserves close to the amount of actual deposits, but by devising a system "that will permit of the largest possible expansion of bank credits consistent with safety. It is obvious," he says, "that our currency question is really a question of bank credits and bank reserves. The problem is, while preventing any unsafe expansion of credits or the issue of any unsafe currency, to find a way (1) to avoid a depletion of bank reserves and the consequent large reduction of bank credits in times when lawful money is withdrawn to pay taxes, etc., and (2) to enable the banks in times of great business activity to expand their deposit liabilities and their loans and discounts and also adequately to increase their reserves of lawful money.

"While there is no practical way of increasing the aggregate amount of lawful money in the country except by digging gold out of the ground or by importing it from abroad, there is a way of rendering available as bank reserves part of the gold and other lawful money already in circula-

tion among the people. This result can be brought about through the issue of bank notes, which are merely promissory notes of the banks to pay lawful money to bearer on demand."

Mr. Morawetz suggests as a solution of a difficulty which he points out in the reserve requirements of national banks, that the banks be required to keep in cash on hand in their own vaults considerably larger minimum reserves against deposits of other banks than the requirement now calls for, and against other deposits a smaller reserve than is now required.

"There is no country in the world," Mr. Morawetz goes on to say, "where the volume of currency in circulation and the demand for bank credits fluctuate more widely than in the United States. In the United States there is no way of regulating the supply of bank credits and of holding part of the potential supply in reserve for periods of financial stringency. Consequently, nearly always there is either an overabundance of money (meaning credit which the banks are willing to lend) or a money famine.

"The leading nations of Europe have learned by experience that the only practical way of regulating the general expansion of bank credits so as to provide for exceptional conditions, as well as for the ordinary requirements of commerce, is to invest boards of experienced men with some measure of power to control the expansion of bank credits, and in particular with the power to regu-

late the issue of bank-note currency. This control can be exercised by the central bank in the following manner: —

(1) By acting as a bank for the discount of commercial paper.

(2) By issuing its notes the central bank can prevent a withdrawal of bank reserves for use as circulating currency and a consequent financial stringency, and *by diminishing the volume of its outstanding notes it can check overexpansion when the occasion for the issue of the notes has passed.*" This last feature is very important and should not be overlooked. A permanently successful system must be able to contract the currency when the demand is below normal as well as to expand it when the reserve is above normal, in recognition of the Law of Equal Reaction.

Our Aim Must be to Mitigate and to Prevent Panics.

The currency system which this country is ultimately to have will undoubtedly be the composite views of many men all harmonized and adjusted to the environment they are especially planned to fit. It may be some years yet before we have perfected our system. Whatever form our banking laws and customs will take, however, they must primarily aim at cessation of panics. To mitigate and, if possible, to do away with these must be their chief purpose.

All Financial Crises Show Many Similar Characteristics.

All financial panics have much in common, both in their causes and in their courses. The keynote to practically all of them has been extension of credit to the point where stretching can no longer occur. The consequent sudden retraction has brought on the severe stress from which so many have periodically suffered, especially during recent years in the United States. Beginning with one of the great panics of the world in the nineteenth century, that of England in 1825, we see much that is alike in all.

The panic of 1825 came at the height of prosperity. Everybody had been well-to-do, all seemed rosy; but underneath a general extension of credit had been going on; there had been much speculation, much pyramiding of investments. Suddenly, in the fall of 1825 the crash came. Credit was restricted and prices everywhere fell. "In six years," says Mr. H. M. Hyndman, in "Commercial Crises of the Nineteenth Century," "no fewer than seventy provincial banks failed." Matters adjusted themselves after a time, but not till very serious results had occurred. As the readjustment took place the most noticeable factor in the situation was the glut of commodities on the market.

Recent Panics Have Been Like Earlier Ones.

The panic of 1836, when, as Mr. Hyndman says, "the whole of the American banks suspended specie payments, and eventually, in 1837, 618 banks, and in 1839, no fewer than 959 banks failed," was very much like that of 1825 in England. The same forces were at work though in a somewhat changed environment.

The crisis of 1847 was brought on abroad by the failure of crops and the consequent exit of gold for foreign grain. In the United States it came from excessive speculation and imperfect banking. The later crises of the century, and especially the crisis of 1857, that of 1884, 1893, 1903, together with the panic of 1907, showed much that was similar to these earlier periods of business upheaval. In all an allowed credit that was inequivalent to the real business needs of the nations involved was one of the causes.

Financial Crises May Arise From the Granting of Too Little or Too Much Credit.

Panics may come from the allowance of too little credit and from the allowance of too much. Usually, however, owing to the general optimism of mankind, a panic comes from the granting of too much credit. Often a general extension of

credit is followed by a sudden swing of the pendulum in the other direction, bringing as great a retraction of credit as there has been an extension, and thus intensifying the acuteness of the situation. To prevent panics and to mitigate them when they have arisen we must have a credit flow which will rise and fall with the true business demands of the nation. These demands should be followed when they advance on a firm basis, and restrained when they go beyond their depth.

An asset currency based on commercial paper, which represents a certain level of commodity prices, must keep pace with those commodities when their price represents true value in the credit supply of the world. Such an asset currency must not, however, follow commercial paper through a level of prices for commodities which, when weighed against the credit supply of the world, are sure to prove overheavy. There must be a ready method for such an asset currency to contract if it finds it is overstepping itself in its pursuit of true commodity prices.

We Should Introduce Innovations in Our Banking Very Guardedly.

Any change in our banking methods should always be approached with the greatest forethought and care, and any change to be made should be made slowly. The writers of these pages have tried to show that our first need is, as we have

done, to create a central discount market for commercial paper. We have tried to prove that some central reserve association of bankers should always be given some powers over the reserves of national banks. If one section of the country has much money it should be possible to place it readily at the disposal of the part where a stringency exists. The limitations as to the investments of this association should, of course, be so very stringent that only the strongest borrowers shall have access to its aid. Money made use of by the association should count as part of the reserves of the banks owning it.

A Union of Reserves and an Asset Currency are Separate Problems.

The question of note issue based on commercial assets is an absolutely different proposition from that of a union of reserves. As we improve our banking and increase the confidence of people in it we shall not need very often an asset currency. It is the hoarding of money both by individuals and by banks that creates the call for such a currency. Money is apt to be tight in the crop moving periods. This is a perfectly natural situation and is not so very terrible an affair provided it is not allowed to cause a panic every time the crop moving season arrives.

To have a jump of five or ten per cent in rates is not natural, however. That this may happen is

largely a matter of manipulation, largely of our fear of conditions. An asset currency will probably prevent it; but an asset currency has some dangers which we should if possible avoid. Probably a combination of the reserves with a continued confidence in our banking system and in our mercantile finance, with especial reference to commercial paper, does away with much of the need of an asset currency. In fact, by a more general study by bankers of fundamental business conditions and by increasing the general respect for our commercial paper so that there will be a market for it abroad when our own reserves are exhausted, the issuance of an asset currency can generally be avoided.

CHAPTER VII

HOW INTEREST RATES MAY BE FORECASTED.

UP to within the last few years economists have been divided into two "schools," when discussing the course of future interest rates. One school has considered simply the element of *time*, believing that there is a periodic rhythm in the course of rates and that a period of low interest rates comes approximately every so many years. They believe that this period is — within a certain number of years — again followed by a period of high interest rates, and so on. Believers in this theory, however, disagree as to the length of the periods. Although all agree that there are major periods of approximately twenty years, the length of the average business generation, yet they differ as to the duration of the minor periods. These minor periods, however, are the ones in which the country banker is interested and which usually last only from one to five years. The fact that students differ so widely as to the duration of the said periods of time is one reason why we believe they are wrong in their assumptions. In fact, we strongly believe that there is no economic basis for the statement that interest rates must rise and fall according to any period of time.

The Intensity of Business Periods Should be Examined.

The other school of thought bases its prognostications on the theory that fluctuations in interest rates are due only to the *intensity* of the business period;—that is to say, that interest rates will continue to increase until they reach a certain height, when they will then decline. They believe that the decline will continue until rates reach a certain low point, when they will again begin to increase. Their reasons are very plausible. They claim that the high point is reached when rates exceed the value and usefulness of the money, and the low point is reached when the rate is too small to pay for the trouble involved in the lending. On analyzing these reasons, however, they will be found to be very superficial, as the value is an indeterminable quantity, and supposed to be dependent upon supply and demand.

Business Intensity Alone Will Not Forecast Rates.

It might be said that the men who believe that *everything* is regulated by supply and demand also belong to this school; for the terms “supply” and “demand” are very indefinite and mean nothing of themselves. In fact, if one of these “supply and demand men” is asked to name the causes of the supply or the causes of the demand, he

immediately places himself directly in one of these two "schools" of thought. Therefore, it may fairly be said that, up to the present time, most students of fundamental business conditions have been divided into these two schools. One school bases its prognostications on the *factor of time* and the other on the *factor of intensity*, or, in this case, interest rates. Neither of these two schools of thought has, in our opinion, true economic reasons for its theories, and this doubtless is why the said theories have failed to demand more serious consideration.

Rates Depend on both the "Duration" and the "Intensity" of Business.

In more recent years, however, there has developed a third school of thought which bases its prognostications on what is known as the "area theory." This area theory is based upon the Law of Equal Reaction and considers both the *factor of time* and the *factor of intensity*, or *rates*. Their study of future interest rates is based on the product of these two factors of *time* and *rates*, or in other words, on the *area consumed*.

The Area Plan Best Represents Business Conditions.

In short, this new school draws an oblique line, with a slope based on the increase in the nation's volume of trade, the fluctuation of which may be

determined by "PT" in Professor Irving Fisher's formula, $PT = MV + M'V'$.¹ Starting at a time when the business of the country is practically normal, as early in 1903, actual business conditions may be plotted from month to month. This gives certain areas below and above this line of normal growth, which line is based on "PT," these areas being shown on the plot inserted at page 53 as A, B, C, D, E and F. In order to plot business conditions from week to week, twelve of the most important of the following subjects are considered and combined: (1) Building Construction, (2) Money in Circulation, (3) Comptroller's Reports, (4) Loans of the Banks, (5) Cash held by Banks, (6) Deposits of Banks, (7) Surplus Reserves of Banks, (8) Total Bank Clearings, (9) Bank Clearings excluding New York, (10) Stock Exchange Transactions, (11) New Securities, (12) Business Failures, (13) Labor Statistics, (14) Imports, (15) Exports, (16) Balance of Trade, — Volume of Trade, (17) Gold Movements, (18) Foreign Money Rates, (19) Political Factors, (20) Production of Gold, (21) Commodity Prices, (22) Crop Conditions, and Iron Production, (23) Railroad Earnings, (24) Idle Car Figures, (25) Religious and Social Statistics. These twelve subjects are:

¹ See "The Purchasing Power of Money," by Irving Fisher, published by The Macmillan Co. (M = Amount of money in circulation; M' = Amount of individual checking deposits; V and V' are the respective velocities of these factors; T = Volume of trade; and P = The price index.)

MERCANTILE CONDITIONS.

- | | |
|-----------------|-------------------|
| 1. Immigration | 3. Failures |
| 2. New Building | 4. Bank Clearings |

MONETARY CONDITIONS.

- | | |
|---------------------|-------------------------|
| 1. Commodity Prices | 3. Foreign Money Rates |
| 2. Volume of Trade | 4. Domestic Money Rates |

INVESTMENT CONDITIONS.

- | | |
|-------------------------------|----------------------------|
| 1. Condition of Leading Crops | 3. Political Factors |
| 2. Railroad Earnings | 4. Stock Market Conditions |

After obtaining such data each week, the latest figures on each subject are reduced to index figures, on the same principle that the London Economist reduces the prices of a number of different commodities to one common index figure. This index figure is a sort of "barometric index," showing each week the general business conditions throughout the entire country. By systematically plotting each week this barometric index number, one has the outline of a plot that shows graphically general business conditions as determined by fundamental statistics.¹

Mechanical Law is Applicable to Business Conditions.

In the plot reproduced at page 53, the large black areas — A, B, C, D, E and F — are the result of such an outline obtained in such a manner and

¹ See "Business Barometers" by Roger W. Babson. Price \$2.00.

representing the past few years. This is known as a Compositplot of Business Conditions. This Compositplot shows *first*, the business conditions existing today compared with any other time since 1904; and, *second*, based as it is upon the law of "*action and reaction being equal when the total force involved is considered*," it indicates how much longer present conditions are to last.

The Law of Equal Reaction.

Every one who has studied physics is acquainted with Sir Isaac Newton's explanation of this law which is universally recognized as fundamental in the material world. Briefly, this law is that *all action is followed by equal reaction*. The most primitive illustration is in connection with the bow and arrow. The force of the arrow is equal to the force expended in pulling the bow. The same principle applies to the spring gun. The boy gets out of the spring gun a force equal to that which he expends when pushing back the spring. The pulley, the lever, and almost all mechanical contrivances are based on this fundamental law. Perhaps the most common illustration is the pendulum, which swings an equal distance from one side of the vertical to the other, the spring of the clock being of use merely to overcome the friction of swinging.

The use of this law, however, is not confined to mechanics. It is also the basis of the study of

astronomy, of experiments in chemistry, and of the development of every known science. It has only recently been recognized as the basis of economics. Today, leading economists agree that panics are simply reactions from the extravagance, inefficiency, and corruption which develop in an era of prosperity, while booms are merely the reaction from the economy, efficiency, and industry developed during hard times.

With this principle in mind, the great value of the Compositplot in anticipating conditions is very evident. The outline of the black areas shows actual conditions. The resultant X-Y Line shows approximately average conditions, while the relation between the two lines shows whether business is prosperous or depressed. If business has enjoyed a long period of prosperity and there is a large area above the X-Y Line, the Law of Equal Reaction suggests that an equal area may soon be expected below the X-Y Line. Conversely, if there is a large depression area below the X-Y Line, we may confidently expect the next period to be one of prosperity. Furthermore, the duration of the present period can be estimated fairly closely by noticing how rapidly the area above or below the Line is being developed. For instance, a shallow area continues for a very much longer time than a very high or deep area.

Of course, the Compositplot does not prove that the Law of Equal Reaction applies to economics. Rather the Compositplot assumes the Law

of Equal Reaction. It is unfortunate that business goes in waves as it does. There is no doubt that these waves could be eliminated to a very large extent. It is true, however, that, so long as conditions and money rates vary from one side of their normal line, there must be a corresponding variation on the other side, at least when considering the areas. Real progress comes only through improved methods of production and distribution. Such improved methods raise the X-Y Line, which is the real index of a nation's growth.

The Relation Between Service and Reward.

Readers will have noticed that there are two classes of illustrations given above in connection with the explanation of the Law of Equal Reaction. The simplest of these, as already suggested, is that of the pendulum. This is, in a way, also, the most fundamental, as wave motion underlies the transmission of sound, light, electricity, and every known form of energy.

An entirely different application of the law is illustrated by the arrow and the spring gun. The spring gun principle applied to human relations simply means that we get out of life a reaction equal to the effort we expend. For instance, we get strong physically as we exercise, not as we rest. We develop our brains as we use them, not as we let them remain idle. In the same way, wages

and profits are simply a reaction from service rendered. This may not be popular doctrine, but it is strictly economic. Most of us get in this world what we deserve,—no more and no less. With artificial barriers removed, revised inheritance laws, and a few other changes in the mechanism of civilization, we all would be getting what we deserve. With this order of things, of course the lazy and inefficient would be worse off than they are today, but to offset this, many people would be much better off. Under such conditions the X-Y Line of the Compositplot would doubtless be rising much more rapidly.

This latter application of the Law of Equal Reaction, however, has a very definite relation to the loaning of money. Money is entitled to a simple rate of interest as reward for saving. This rate varies from $3\frac{1}{2}$ to $6\frac{1}{2}$ %, according to circumstances. This rate is based on the average risk and the service performed by the average lender. $4\frac{3}{4}$ % interest for money is a standard rate, the same as two dollars a day may be a standard wage. Any intelligent investor can get 4% with safety, the same as any workman can get two dollars a day. For a man to get five dollars a day or ten dollars a day, he must render special service. It is the same with loaning of money. Most losses incurred by lenders are due to the fact that they try to secure an abnormal rate of interest without delivering an abnormally increased service. If you get a position at five dollars a

day for some friend who is worth only two dollars a day, he soon loses his job. In the same way, if you attempt to get a higher rate of interest than the rates above mentioned, without delivering additional service, you lose your money.

But you ask how this additional service can be delivered? Here again the Law of Equal Reaction gives the answer. Perform the service of storing money when securities are in great demand and money is easily secured; and conversely, of exchanging this money for securities when money is in great demand and securities are a drug on the market. Ice is of no value in winter, but the man who stores it in winter when it is a nuisance, and sells it in hot weather, when it is in great demand, performs a real service and is well paid therefor. The lender who performs a similar service will be rewarded in a similar way. He must, in accordance with the Law of Equal Reaction, secure such a reward. Wages and profits are merely reactions from service rendered. The wage for money is the normal rate of interest paid for saving — that is, from $3\frac{1}{2}$ to $6\frac{1}{2}\%$. The profits above such a normal rate come from abnormal service rendered. Those who render such abnormal service get the increased profit, while those who attempt to secure it without rendering such service make a loss. The loss also comes as a result of the operation of the Law of Equal Reaction.

Conclusion.

The important thing is to know *when* to loan. This can easily be known by glancing each week at the Compositplot of Business Conditions and saturating one's self with the principle involved in nature's greatest law, the Law of Equal Reaction. In reality, this means to put out your money when you can perform a real service, usually when your friends and neighbors think that the country is going to destruction and hence will not loan.

The Area Plan Will Forecast Rates Better Than Any Other.

This Compositplot, therefore, shows bankers and merchants the actual conditions existing at any given time, and, on the assumption that these areas tend to be equal *in area* (not in shape), it aids one in forecasting future conditions *by showing whether the next area may be expected above or below the line of normal growth and about how long it may be before it will come*. Of course, this third "school" simply combines the work of the two former schools, as those of us belonging to the third "school" consider both time and rates, instead of simply one of these two factors. On the other hand, a little thought shows how reasonable this third theory is and how it automatically adjusts itself to conditions, the same as a governor on an engine. For instance, if rates increase 20 %

above a normal, it is not reasonable to think that they will necessarily continue to go up until they reach the last previous high of 8 %, irrespective of the time consumed; but it is reasonable to suppose that after rates have had this increase of 20 % for a period of three times as long as they held when selling at the previous high, which was an advance of 60 %, that they should fall.

Rates Follow Changes in the Business Areas.

In other words, the theory is that business conditions as a whole can continue with "the throttle one-third open" about three times as long as with the throttle wide open; or, to word it another way, when conditions are trebly prosperous, they can so last only one-third the period of time that they would if they were only moderately prosperous. This school believes that if the country should be willing to run along at a normal rate of speed so *that the line for actual business would correspond with the line of normal growth*, we should always have moderately prosperous conditions with a steady, slow advance. On the other hand, the higher that the line for actual business rises above the line of normal growth, the shorter the length of time prices will remain high and conditions be abnormally prosperous.

Any Special Business Study, Such as the Study of Rates, Must be Based on the Area Plan.

The preparation of this Compositplot of Business Conditions, however, is simply the first step, or the basis, of this most recent and hopeful work relative to forecasting interest rates.¹ After preparing this Compositplot, the next step is to plot thereon a line representing the interest rate for prime commercial paper in order to ascertain the relation between interest rates and this Compositplot. This work is now being done by a number of institutions in different parts of the country, and most wonderful results are being obtained.

Such Studies Prove Definite Laws.

The first work performed was to ascertain the relation of the commodity market to the Compositplot, and it has been found that the lowest commodity prices have come when the depression areas have been about two-thirds consumed, while the highest commodity prices have come when the prosperity areas have been about two-thirds consumed. When forecasting the average of thirty-two active stocks by the Compositplot, it has been found that the high points of the stock

¹ See Irving Fisher's (Yale University) standard work on "Interest."

market have come when the prosperity *areas* are about one-fifth or one-fourth consumed, and the low points of the stock market have come when the depression *areas* have been about one-fifth or one-fourth consumed.

Business Areas, if Properly Drawn, Forecast Interest Rates.

In the same way the money market is now being forecasted, and the Composite Business Plot, above referred to, also contains a line showing the fluctuations in prime commercial paper rates since 1904. The following law will be found to be true.

INTEREST RATES ARE HIGHEST WHEN THE PERIOD OF PROSPERITY IS APPROXIMATELY CONSUMED, AND INTEREST RATES ARE LOWEST WHEN THE PERIOD OF DEPRESSION IS ABOUT CONSUMED—THAT IS—RATES REACH THEIR HIGH POINT IN THE LATTER PART OF A PROSPERITY AREA, WHEN THEY TURN, AND CONTINUE TO DECLINE WELL INTO THE DEPRESSION AREA, TOWARD THE END OF WHICH THEY AGAIN BEGIN TO ADVANCE. WHEN THE PROSPERITY AREA IS SHALLOW, RATES WILL CONTINUE FAIRLY FIRM FOR A MUCH LONGER PERIOD OF TIME THAN WHEN THE PROSPERITY AREA IS HIGH, AND VICE VERSA; BUT WHEN THE PROSPERITY AREA IS HIGH AND SHORT, RATES MAY SUDDENLY INCREASE TO A VERY HIGH POINT, AND A MONEY PANIC SOMETIMES FOLLOWS.

Study of the Compositplot of Business Conditions is of Enormous Value.

Heretofore, the bankers and business men have either followed one of the two above mentioned "schools of thought" or else guessed, and thus in most cases have found themselves mistaken. If the law above mentioned is true, hereafter the business man need simply to watch this Compositplot each week, noting its development, and, by the use of the above mentioned law, know approximately when to expect a turn in interest rates. If the area develops slowly, he may know that it will be some time before interest rates will radically change, and he may base his commitments in accordance therewith. On the other hand, if the prosperity area develops very rapidly, as was the case in 1906, he may expect higher rates at any time and should plan his business on the assumption that there may be a money stringency. Thus, by watching the growth of this area from week to week, bankers, manufacturers and merchants may forecast with wonderful accuracy the probable course of money rates, giving due consideration to the seasonal fluctuations which have been most carefully deduced by Prof. E. W. Kemmerer, as follows:

Seasonal Variations Must be Allowed For.

The study, the results of which are here presented, was made to throw light upon the regularity and the extent of the seasonal variations in question, and the degree to which our currency and credit system responds to them; and to exhibit some of their probable results upon more general economic conditions. The study is based upon the period from 1890 to 1908 inclusive, so far as data have been found available. The statistical material given was secured in part directly from clearing house associations, in part from individual bankers and public officials, and partly also from government reports and financial journals.

The New York Money Market Has Five Periods.

In the consideration of the changes in the demand for moneyed capital in representative cities prominence is, of course, given to conditions at New York City. A study of the data for that city leads to the conclusion that there are five periods in New York's money market. Beginning with the opening of the year there is throughout January a rapid decline in the relative demand for money, making the last part of that month and the fore part of February a time of very cheap money. This easing up is attributed to the fact

that the crop-moving demand for money in the West and South has spent its force, and that the cash is flowing back to New York. Among other causes mentioned is natural reaction after the heavy strain on the money market incident to January 1 settlements.

The Second Period Begins in February.

The beginning of the second period is put at about the middle of February, the relative demand for money advancing rapidly to a high level and maintaining it through the fore part of April. One source of this upward movement is found in the encouragement given to investment by the low interest rates and the high reserves of the former period. Another cause suggested is the increase in certain lines of trade activity which normally takes place at about this time of the year. The Great Lakes, the Mississippi River, and other inland waterways are opened to traffic during this period, and railroad traffic is released from the incubus of cold weather and snow.

The Later Periods are Well Marked.

A third important seasonal movement is traced in a rapid decline from about the middle of April, ending with a very weak money market in June and July. The latter are hot summer months, comprising the vacation period and the period

before the great crop movements of the fall. A fourth period is dated from the first week in August, when call rates begin their upward movement and when bank reserves, both in amount and in percentage to deposits, begin their decline. There is a continued tightening of the money market until about October. Of the increasing demand for moneyed capital during this period the principal cause is the call made upon the New York City banks by banks in the West and South for cash needed for crop-moving purposes. The last seasonal period in the New York money market dates from about the first week in October to the opening of the new year, and during this period the relative demand for moneyed capital, while exhibiting many minor fluctuations, remains at substantially the high level reached in the fore part of October. It is true that the Federal Reserve System tends to diminish these seasonal movements of money, but it will probably take a considerable time to eliminate them entirely.

Conditions in Different Parts of the Country Vary.

Another phase of the subject is dealt with in an examination of the demand for money in one section of the country as compared with the demand in another. Professor Kemmerer finds "that throughout January money in Chicago, relative to that in New York City, is cheap. There

is a considerable movement of cash from Chicago to the Eastern States, particularly to New York City, where it can at least earn the 2 per cent paid by banks on bankers' balances. From the last of January to the fore part of March the demand for money in Chicago, relative to that in New York, rapidly rises, owing to the anticipated and actual opening of navigation on the Great Lakes and to the spring needs of the western farmers. A decline comes in Chicago's demand for money from early in March till late in May, the demand being comparatively small from then until the fore part of July. About the first of the latter month the relative demand for money in Chicago begins to rise, advancing rapidly until early in September, and then maintaining a high level until the fore part of November. During the last six or eight weeks of the year, the crop-moving demand having to a large extent subsided, the relative demand for money is stronger at New York City than in Chicago, and cash moves eastward."

Bank Reports Should be Constantly Examined.

As a check upon the plan outlined it is desirable to study the Comptroller's Reports as issued about every two months, and the New York Bank Statements as issued weekly. When using these Comptroller's Reports and Bank Statements, the

following tentative general rules may be considered.
During a period of prosperity:

(1) When the Loans of the Comptroller's Reports exceed the Deposits by more than about 6 %, a period of high money rates may be expected.

(2) When the Loans of the Comptroller's Reports increase at a greater rate than the Deposits, higher money rates may be expected.

(3) When the ratio of the Reserve to Net Deposits in the Comptroller's Reports falls below 22 % or thereabouts, higher money rates may be expected, and the condition is more overstrained if this occurs during the fall of the year.

(4) When the Deposits of the New York Bank Statement decrease so as to equal the Loans, higher money rates may be expected, and if this continues, the situation is serious.

(5) When the Surplus Reserve of the New York Bank Statement remains abnormally low for a considerable number of months higher money rates may be expected.

The Compositplot Continually Improved.

Although this Compositplot is now being used by most of the prominent banks in America and Europe, it is being continually improved and all work entering into its preparation is being most carefully scrutinized, revised and enlarged upon. Additional subjects are continually being studied

to be used as factors, and experimental work is continually in process as to various methods of weighting and combining these subjects. Moreover, the line of growth is being continually revised in order that it may, as correctly as possible, represent the real growth of the country in wealth, population and activity.

Therefore, although small changes may take place from time to time, the great fundamental principle of the Law of Equal Reaction as applicable to money rates, is absolute and unchangeable. It, therefore, behooves all bankers and others to carefully keep in touch with this Compositplot and watch its changes from week to week, noting how the areas are developing. Moreover, one of the most remarkable and convincing factors regarding this Compositplot is the almost imperceptible apparent change in appearance, caused by reweighting, changing subjects and various other experimental work, which economists are doing in connection therewith. All of which signifies that through this Compositplot of business conditions, we have the very best method of correctly anticipating the long movements in money rates.

The Area Theory Must be the Basis for Much Investigation.

In closing, therefore, we urge all readers to give this Compositplot greater thought and study. Although we are perfectly willing to grant that at the present time it is in its infancy, and that ten or twenty years hence we may look back with shame upon its present incompleteness, nevertheless the economic principle underlying the Area Theory is absolutely sound. If so, should not all of us unite in striving to apply it by devising a Compositplot which will correctly interpret the said laws?

It is Essential That We Should Solve Business Problems Correctly.

As a final word, the reader is urged to consider the Law of Equal Reaction in relation to greater things than the loaning of money. In its fullest sense, the Law of Equal Reaction is that, for every act, word, or thought, there is a reaction upon the person, class, or nation from which it goes. This means that abuse reacts as abuse, and helpfulness reacts as helpfulness; that confidence begets confidence, and distrust begets distrust. In other words, the world pays us in the same coin which we ourselves use.

Today the application of this law to human relations is little understood. A great develop-

ment along social, industrial, and international lines, however, is coming about in the near future through a recognition of this principle. Some day, it will become the foundation even of religious teaching, as the Golden Rule is based simply on this fundamental law.

Once the nations of the world were dependent upon their armies. The nation which had a Cæsar or a Wellington ruled supreme; later the statesmen ruled, and the nation which had a Pitt or a Bismarck determined the world's policy; but today the commercial interests of the nation dictate the world's policy. The credit of our country or of any country during the next ten years will not depend on its armies or its statesmen, but rather — after character — upon its bankers and merchants. Therefore, is it not our duty to see that our young men are trained to diagnose correctly and, if possible, to forecast social and business conditions in order to guide safely our great industrial and financial enterprises, upon which the future of our nation is so dependent?

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